Overview of the BC Wood Products Industry & Export Trends By Product & Market

(2003 Export Data Basis)

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FOR:

Forestry Innovation Investment Ltd.
Vancouver, BC

BY:

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1 INTRODUCTION

R.E. Taylor & Associates Ltd./International WOOD Markets Research Inc. has been retained to provide Forestry Innovation Investment Ltd. (FII) with an overview of the B.C. wood products industry to support the development of its investment strategy for 2005/06. The objective of this project is to provide a strategic overview of the B.C. wood products industry and its key export markets. We have produced a compact report that summarizes the main issues, trends and markets (but avoids a number of details even though some can be important). We have expanded our market analysis in some export markets, especially where B.C. export volumes are high or where growth is expected.

The basis of our work plan has been to utilize our existing data base and network of contacts to provide the necessary summary of key information on B.C.'s wood products industry and its major markets (and by major commodity product). The work plan has been designed around the needs of FII and incorporates B.C.'s wood product industry and exports as well as highlighting the key export markets.

Due to the limited availability of consistent data on the value-added industry and markets, the majority of this report is limited to commodity wood products that include only softwood lumber, softwood plywood, oriented strand board (OSB), particleboard and medium density fibreboard (MDF). All other products are outside the scope of this summary report. The B.C. industry production and export data used in this report is based on Statistics Canada for 2003 (2004 annual data is not available until second quarter, 2005). Our sources include various offshore industry associations, government reports and private information.

We have not attempted to make any recommendations in this report. Most actions or initiatives mentioned in the report are based on previous research reports funded by FII and/or Canada Wood or from discussion with various B.C. industry associations. We have also not attempted to summarize all actions, initiatives or programs by B.C. Associations in export markets – that is not the purpose of this report. We have tried to provide some direction on where future investment activities by FII could be directed based on the market trends and potential opportunities as well as competitor issues identified in this report.

2 OVERVIEW OF THE BC FOREST INDUSTRY

This section will provide a high level overview of the B.C. forest industry and is limited to selected topics.

2.1 The Importance of the Forestry Sector to B.C.

2.1.1 British Columbia Wood Products Exports

The province's manufacturing industries are largely resource-based, with a major emphasis on forest products (total contribution of 41.8%: wood products = 26.6%; paper = 15.2%). Other sectors include food products (13.1%), machinery (4.9%), fabricated metal products (4.6%) and non-metallic metal products (3.8%). In 2002, the B.C. manufacturing sector had total shipments valued at $23.1 billion, employed almost 200,000 and accounted for an estimated 12 percent of British Columbia's gross domestic product.

The majority of B.C.'s forest products are commodity-type products (including pulp and paper, but excluding furniture, pre-fabricated homes and other specialties) that are exported to international markets. In 2003, $12.6 billion of a total Cdn$14.4 billion sales of B.C. commodity-type forest products (as estimated by PricewaterhouseCoopers), were exported to international markets, This accounted for approximately 46 percent of total provincial exports, and 8 percent of world exports of forest products. This is down from sales of $13.9 billion in 2002 and $14.1 billion in 2001. The largest export sector is mechanically processed wood products (lumber, panels) and this represents 58% of B.C.'s forest products exports. Pulp and paper is second with 37% and log and wood chip exports represent 5%.

The forest industry is important to the economy of B.C. In 2003, there were 78,300 direct jobs from the forest industry in B.C. and an estimated 156,600 indirect jobs (PwC 2004). The forest industry had payments to government of $2.75 billion in 2003 related to Federal ($16 million), Provincial and Municipal ($1.3 billion) and related to direct employees ($1.4 billion).

B.C.'s wood products sector produces an array of products that are dominated by the production of lumber. About 81% of British Columbia's softwood lumber production was exported in 2003 (84% was exported in 2002). Softwood lumber is British Columbia's largest export, accounting for about $5.48 billion in 2003 (vs. $6.5 billion in 2002) as compared to a total production value of $6.2 billion. Of this, British Columbia's softwood lumber exports to the U.S. were worth $3.8 billion (83% of lumber) as compared to nearly $5 billion in 2002.

The primary market for B.C. products is the U.S., which imported 79 percent of B.C.'s total provincial wood product exports (by volume of commodity wood products in 2003,

excluding pulp and paper but including logs). In 2003, B.C. exporters represented an 18 percent share of U.S. softwood lumber consumption, as well as a 48% import market share — a slight decrease from 2002 but this occurred with 27% countervailing and anti-dumping duties imposed by the U.S.

Japan is the second-largest wood products export market, accounting for approximately 15 percent of B.C.'s total commodity wood exports, while lumber exports by volume represent the largest volume and command a 42 percent share of total softwood lumber imports into Japan (although this has been falling in the last seven years).

All other export markets (mainly in Asia, Europe and Oceania) account for the remaining 6 percent of B.C. commodity wood products exports.

2.2 *Industry Trends*

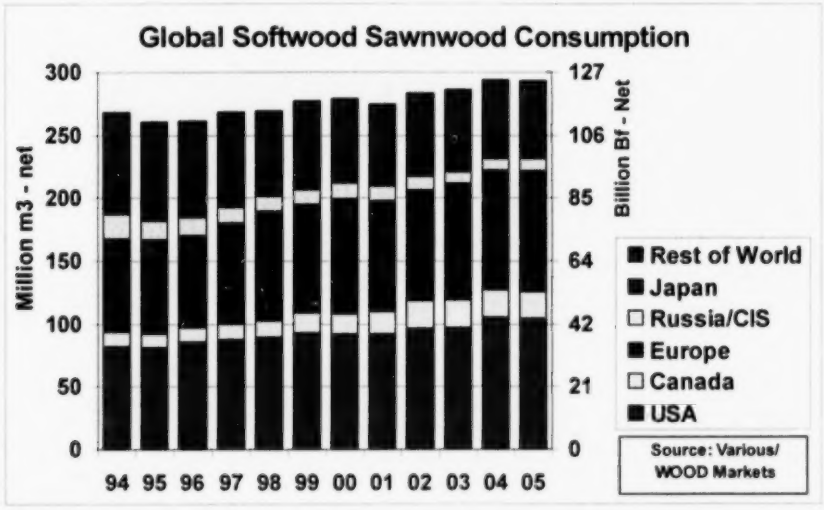
Some of the more important industry trends or issues in relation to B.C.'s wood products sector are discussed below.

2.2.1 Global Perspective

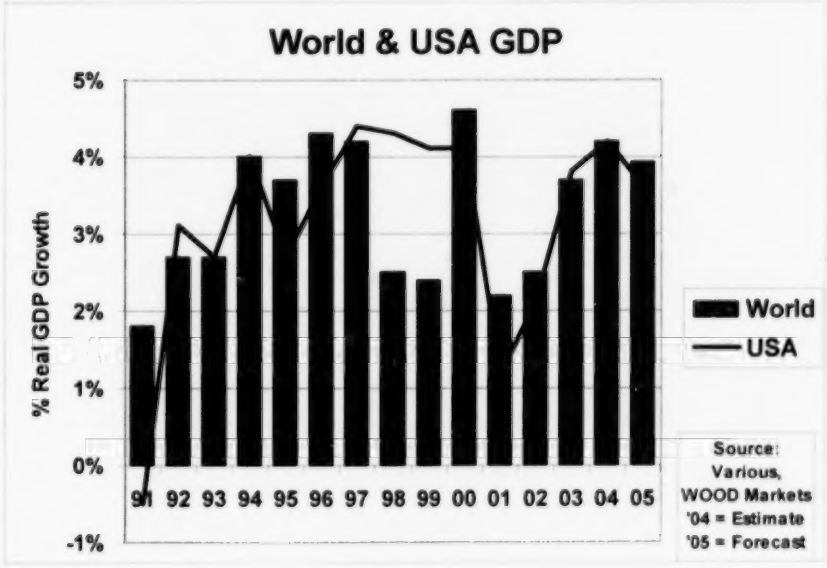
- For perspective, Canada and B.C.'s position in world markets needs to be considered relative to other producing regions and markets so that it is considered from a broader perspective in the FII strategy. A global perspective is summarized here.

- A strong global softwood lumber market in 2004 was the result of improving demand in North American and Europe. The weakening U.S. dollar created considerable pain for many global exporters as well as U.S. importers, but most traders were able to survive the year with higher prices. The outlook for 2005 calls for flat to slightly lower demand, where steady pricing in most markets is the most realistic expected outcome. However, the first half of the year looks to be stronger than the second half, so that is a more positive outlook to start 2005. (Note that the following four industry graphs have adjusted all lumber volumes to a "net" basis; North American "nominal" board feet volumes have been adjusted lower by about 24% to achieve "net" volumes that are comparable to other regions.)

- Global softwood lumber demand increased in 2004 to over 293.5 million m3, net (124 billion bf, net; nominal volumes are higher) — a 2.6% increase that was greater than initially expected. The U.S. led all markets with an 8% increase followed by Canada and Europe — both with improvements of 2.4%. Low interest rates and strong new residential housing were key drivers in most global markets. The exception was Japan, as it is expected to record a 1% decline despite a strong mid-year performance.

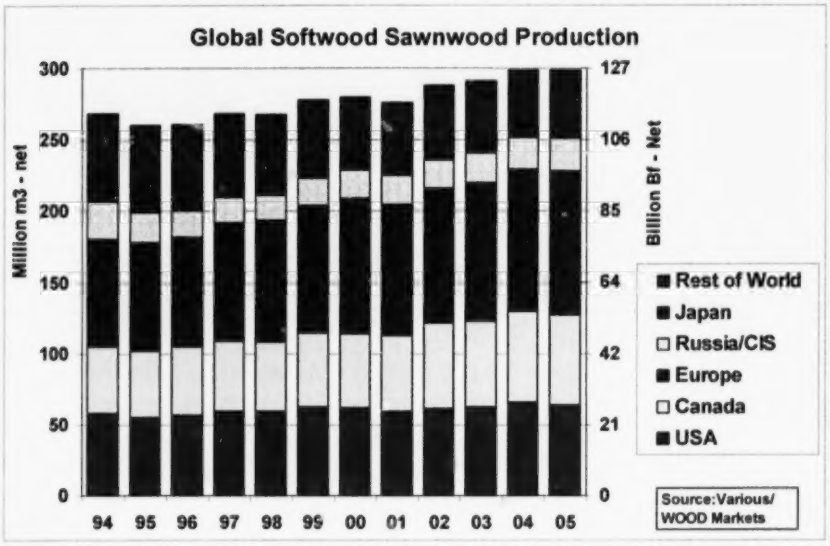


- Global GDP reached a four-year peak at an estimated 4.2% in 2004 and for 2005, GDP is expected to erode slightly to just under 4%. Global softwood demand in 2005 is also expected to move lower, but only marginally (-0.2%), to about 293 million m3, net. Europe and Russia are expected to post modest gains, but North America and Japan are expected to take a breather in 2005. The U.S. and Europe continue to be the major consumers of softwood lumber, and these regions will have the most impact on how 2005 evolves.

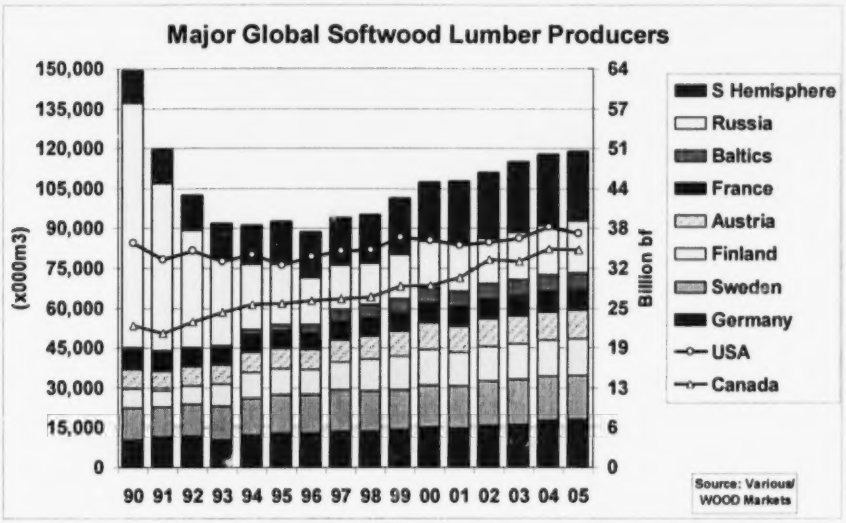


- Global softwood lumber production has increased from 260 million m3 in 1995 to reach an estimated 298.5 million m3 (126.5 billion bf, net) in 2004. Increases in

lumber output continue to be recorded in Europe, Canada, the U.S. and Russia, as these regions dominate softwood output. Domestic Japanese production continues to decline. For 2005, a slight increase to 299 million m3 (+0.2%) is forecast with North America declining but Europe and Russia gaining.



- Germany is expected to become the largest softwood lumber producer in Europe in 2004 with output estimated at 17.6 million m3 (7.5 billion bf, net), eclipsing Sweden's 16.7 million m3. These countries are followed by Finland (13.7 million m3), Austria (10.5 million m3), France (7.9 million m3) and the Baltic States (collectively Estonia, Latvia and Lithuania at 6.0 million m3). These six regions represent 72% of all European production that should, in total, exceed 100 million m3 (42 billion bf, net; or about 62 billion bf if reported on a nominal 2x4 count) in 2004. This compares to a projected 129 million m3, net (74 billion bf, nominal count) that the U.S. and Canada will collectively produce in 2004. The production increases have occurred while European markets have been lackluster, and this has led to a continuous increase in offshore exports — especially to the U.S., Japan, the Middle East and even Australia.

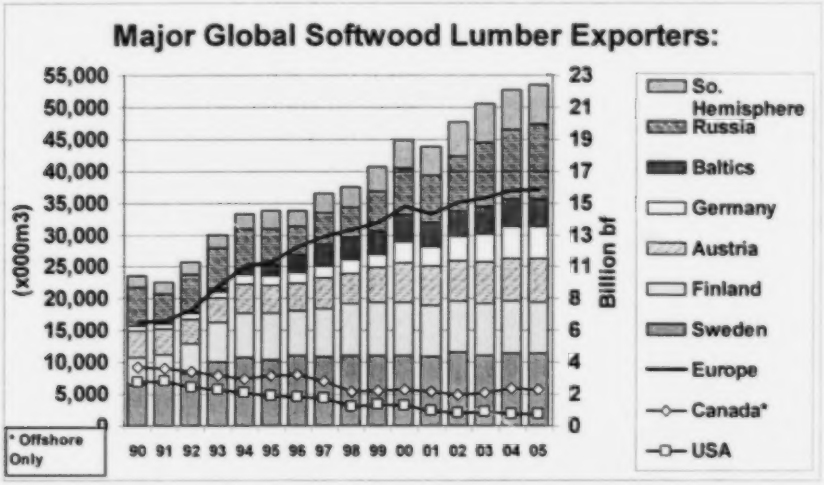


- A number of eastern European countries are also showing stronger output in 2004, including the Czech Republic (3.6 million m3), Poland (3.0 million m3) and Romania (2.8 million m3). All of the twelve counties mentioned above have consecutively increased their output over each of the last five years (with one or two minor hiccups, and most countries have steadily increased output since the early 1990s). New softwood sawmill capacity continues to be built in lower-cost eastern and central European countries to produce commodity-type lumber — and more and more of these new modern mills are being installed with kilns and planer mills. This trend continues to put pressure on higher-cost western European mills, and as a result many have been converted to specialty-type mills. A number of others have been closed to make way for the lower-cost mills outside the region.

- Our own field investigations continue to support what the statistics are showing — Russian softwood lumber production has increased from 16.9 million m3 in 2002 to 18.5 million m3 in 2004, and is projected to reach 19.4 billion in 2005. Similar trends are evident in exports — they are projected to reach 10.8 million m3 in 2004 and 11.6 million m3 in 2005 from 8.6 million m3 in 2002. More importantly, it is the investment in new, modern sawmills and kilns that is allowing for the increase in exports despite strong domestic consumption levels building in Russia.

- While log exports from Russia have increased spectacularly since the mid-1990s, they were slightly lower in 2003 than in 2002, and are expected to be flat again in 2004. The increased internal demand for logs is partly to account for this, as well as many logistical constraints. The new Forest Code is expected to become law sometime in early 2005, and is expected to be the catalyst for the award of many large forest concessions (forest leases) for 49–99 years. These leases will see the establishment of many more sawmills and processing plants over the next five to ten years. They will also enable the expansion of timber harvesting activities, which could also allow for more log exports to both Japan and China from Siberia and the Russian Far East.

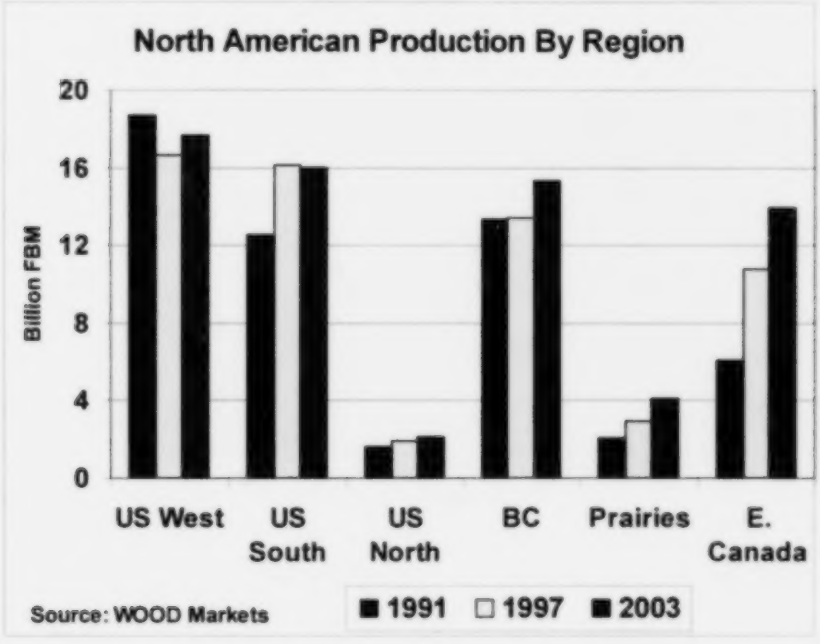
European Russia, however, could be under supply constraints, as the demand from domestic mills and neighboring European countries should keep log prices at levels closer to world market prices.



- The U.S. market established a record-setting performance in 2004 in terms of softwood lumber demand and prices. Lumber production in the U.S. is anticipated to reach 65.5 million m3 — net (38.3 billion bf, nominal) in 2004, a 5% increase over 2003. With higher interest rates already taking place, the prospects are that lumber demand will be lower in 2005 — housing starts could be off by 5%, but repair and remodeling activity should almost counterbalance this. The net result is an expected 1% drop in total U.S. lumber consumption, or from 105 million m3 (61 billion bf, nominal) in 2004 to 104 million m3 (a 500 million bf, nominal decline) in 2005.

- A similar trend is projected to occur in Canada, as housing starts peaked in 2004 and a slowdown is expected in 2005. Lumber output is estimated to hit almost 64 million m3, net (35.5 billion bf, nominal) in 2004 before declining only marginally in 2005. The wildcard for the coming year will be related to the potential elimination and/or adjustment of U.S. duties on Canadian lumber exports, plus the effect of a stronger Canadian dollar that is already at an eleven-year high to the U.S. dollar. Canada's exports to the U.S. will be at record-high levels in 2004 — nearly 8% higher than in 2003.

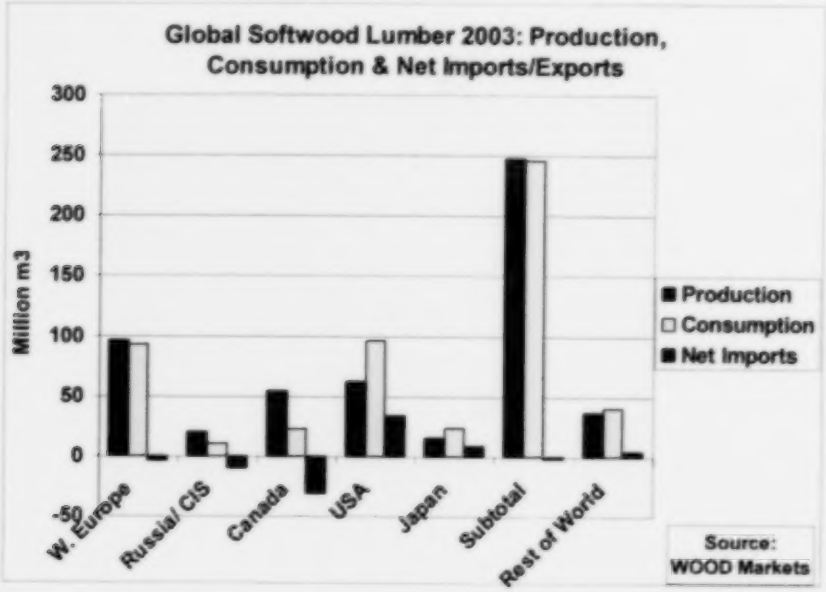
- All regions in Canada have increased softwood lumber production since 1991. In the U.S. lumber output is somewhat higher but the trends have not been consistent throughout the different regions.

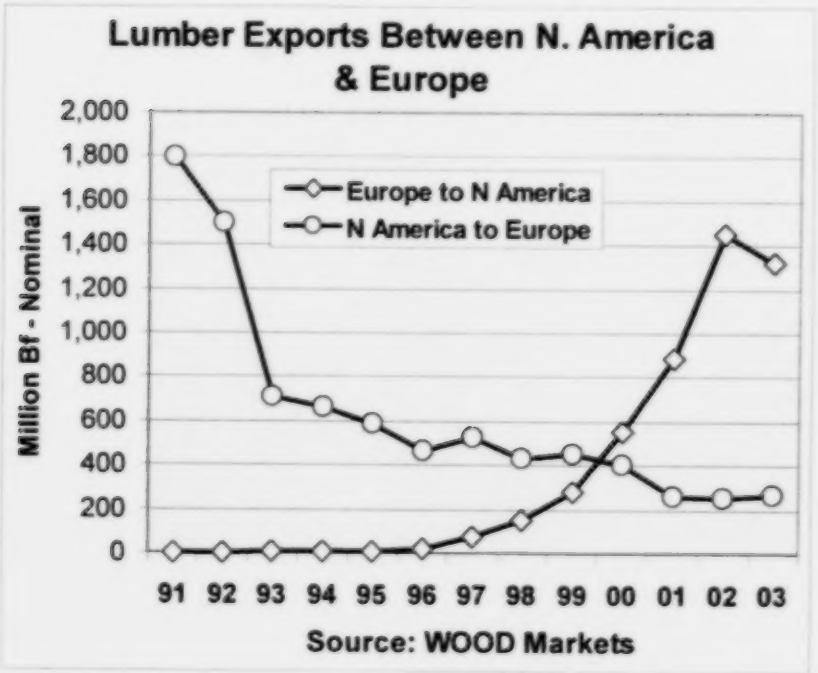


- Japan's housing activity in 2004 is expected to show a modest increase over 2003's 1.16 million housing starts. Japan's lumber consumption and imports have been steady throughout 2004, and prices rallied in the first half of the year to their highest levels since 1999. Japanese softwood lumber consumption is expected to reach 23.4 million m3, a slight decline from 23.7 million m3 in 2003. For 2005, demand is anticipated to see a slight reverse (to about 22.5 million m3), with only flat demand expected. This will keep prices at competitive levels for most of the year.

- China's demand for imported wood products continues to rise, causing some very interesting scrambling by world exporters — particularly in hardwood and softwood logs, as well as in some lumber items. Chinese GDP continues to surge, and 2005 will be no exception. Recent market investigations, however, indicate that raw material shortages both within China and from Russia may cause a rise in input prices for a variety of items within the next three to six months, and this should benefit exporters to China. China will continue to be the wildcard country in 2005.

- Canada's (and B.C.'s) role as the world's high volume, low cost supplier of structural lumber and panels to offshore markets in the 1980s's and early 1990s has changed. While the U.S. market is still, for the most part, the exception to this rule, there are other supplying regions in the world that are offering very stiff competition to B.C in offshore markets and there are more on the way. In lumber and plywood, B.C has lost significant market share in its two largest offshore markets – Japan and Europe – to a variety of established and new suppliers


Global Softwood Lumber 2003: Production, Consumption & Net Imports/Exports
Million m3
300
250
200
150
100
50
0
-50
W. Europe
Russia/ CIS
Canada
USA
Japan
Subtotal
Rest of World
Production
Consumption
Net Imports
Source: WOOD Markets


Lumber Exports Between N. America & Europe
Million Bf - Nominal
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
Europe to N America
N America to Europe
91 92 93 94 95 96 97 98 99 00 01 02 03
Source: WOOD Markets

2.2.2 B.C. Industry Trends

Forests cover about two-thirds (59 million hectares) of the province's land mass. Almost all of the wood in BC is softwood and is used to produce lumber, plywood, oriented strand board (OSB), particleboard, medium density fibreboard (MDF), shakes, shingles, newsprint, and pulp and paper products. In fact, about half of the softwood produced in Canada comes from BC and forest products are the province's most important export commodity, accounting for almost half ($12.6 billion) of the province's total exports in 2003.

B.C. represents about 40% of Canada's primary wood products production and 50% of total exports. Wood products production and export trends for 2003 are provided below.

CANADA & BC: Primary Wood Products Production & Exports - 2003

	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Total
Total Consumption	(x000 m3)	27,468	1,748	2,388	674	2,145	34,423
Canada Total Production	(x000 m3)	77,699	2,183	10,201	1,232	2,991	94,306
Canada Exports	(x000 m3)	50,897	542	7,926	599	1,113	61,078
Canada Imports	(x000 m3)	666	107	114	41	267	1,195
BC Production	(x000 m3)	36,086	1,721	1,795	199	264	40,064
BC Exports	(x000 m3)	29,199	514	1,193	159	190	31,256
BC Share of Canada Prod'n	(%)	46%	79%	18%	16%	9%	42%
BC Share of Canada Exports	(%)	57%	95%	15%	27%	17%	51%

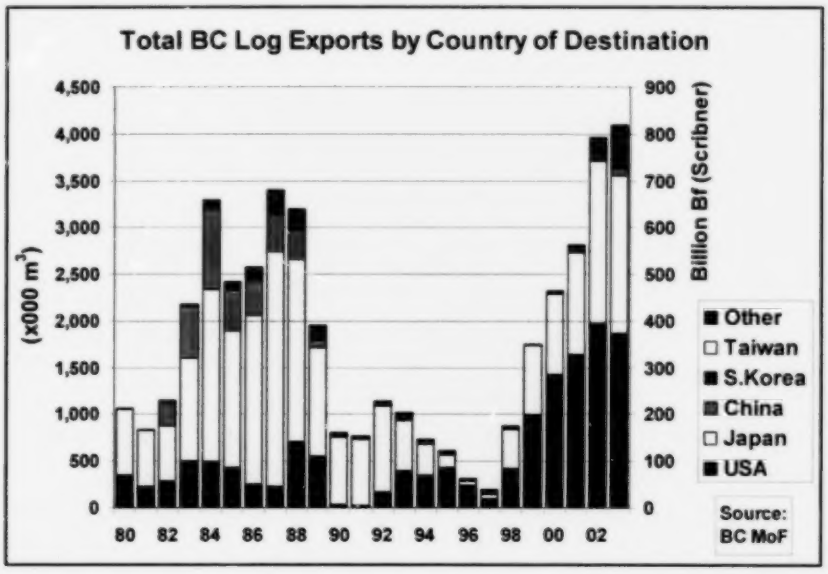
Source: Statistics Canada, WOOD Markets

Some of the issues impacting B.C.'s forest and wood products industries and their competitive position include the following

- Land base and environmental costs have increased from the Forest Practices Code starting in 1994, although has been streamlined in the last few years.
- Harvesting and stumpage costs increased in the 1990s until 1997 when the trend reversed.
- B.C. coastal timber, logging and milling costs are some of the highest in the world and this has had a negative impact on profitability, production and employment.
- The B.C. Interior remains one of the lowest cost producing regions in the world, but consolidation and mill rationalization is still expected to offset costs associated with the U.S. duties on B.C. lumber exports, as well as the strengthening of the Canadian dollar against the U.S. dollar in 2003.
- The mountain pine beetle infestation in Northern B.C. is an epidemic that is killing massive areas of lodgepole pine forests in B.C. but has allowed for a temporary increase in the annual allowable cut to combat this outbreak.
- The US countervailing and anti-dumping duties on softwood lumber exports since May, 2002 have impacted the lumber and remanufacturing sector (some sectors have been harder that others).
- The Canadian dollar has strengthened about 18% relative to the U.S. dollar in 2003 and has strengthened another 6% by fourth quarter, 2004 - this has reduced B.C.'s

competitiveness in its largest market, the U.S. However, the Canadian dollar has not appreciated against most world currencies which has allowed for reasonable competitiveness in overseas markets.

- As B.C.'s largest overseas market, Japanese housing starts and wood products demand slowed down between 1997 and mid-2003 but has since picked up to minimize further financial difficulties that coastal B.C. exporters were having.
- Log exports from B.C. have increased dramatically from the B.C. Coast to the U.S. and Japan as B.C. coastal sawmills curtailed (see graph below).



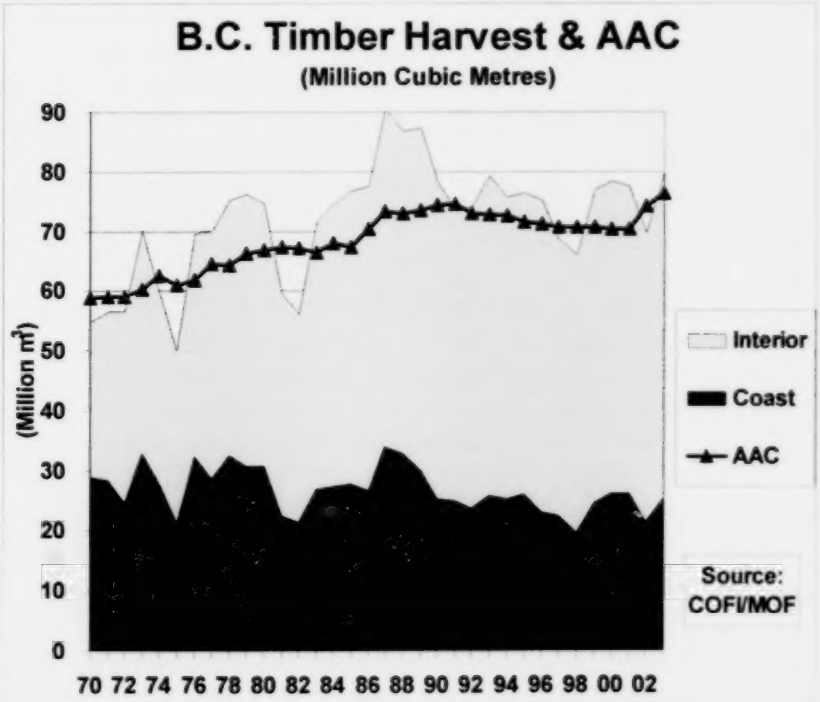
2.3 B.C. Coast vs. B.C. Interior Wood Products Sectors

British Columbia is widely recognized to have two distinct parts of its forest industry – Coastal British Columbia and the Interior. Some of the differences between the B.C. Coast and Interior timber and processing regions are summarized below.

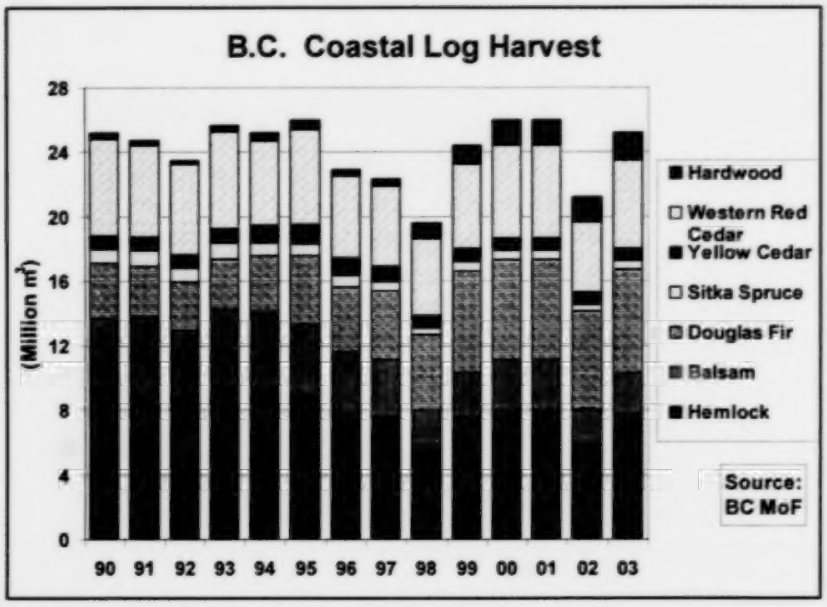
2.3.1 B.C. Timber Harvest

A summary of trends with B.C. timber harvest is provided below.

- B.C.'s timber harvest peaked in 1987 at 90 million m3 and has remained near the 75 to 80 million m3 level since 1999. In 2004, the harvest was 79.7 million m3 – a 10 million m3 increase over 2002.
- The B.C. coast's harvest plunged to a low of 19.6 million m3 in 1998 before rebounding to 26 million m3 in 2000 and 2001. In 2003 it rebounded to 25.2 million m3 as compared to just 21.25 million m3 in 2002.
- The B.C. interior's harvest also plunged in 1997 and 1998 to 46 million m3 but has been in the 51 to 52 million m3 range since 1999. While the harvest was reduced in 2002 to 48.5 million m3 as a result of duties on U.S. lumber and a general weakness in export markets, it has rebounded to 54.48 million m3 in 2003 to reflect a much stronger U.S. market.



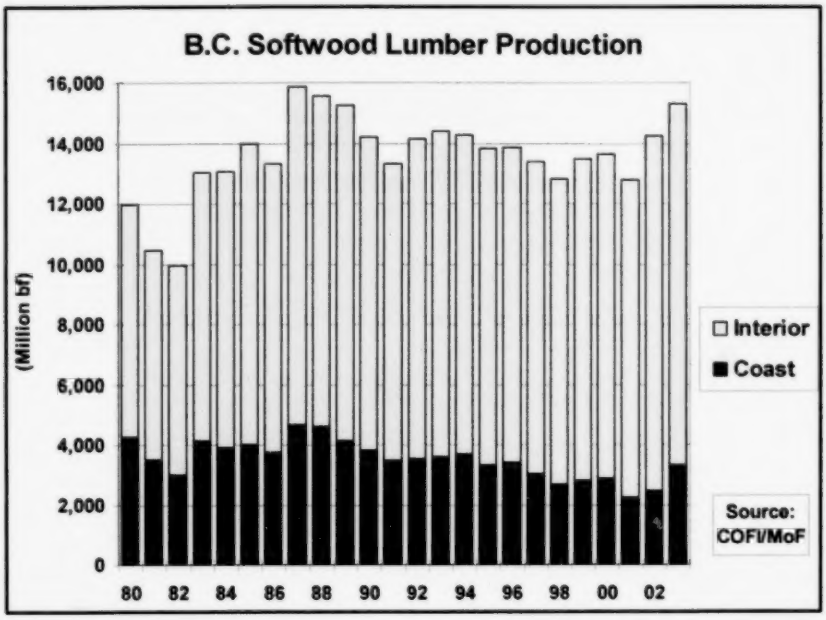
- The B.C. annual allowable cut has been near 71 million m3 for the last 10 years but the mountain pine beetle outbreak in the Interior has required a temporary uplift to 76.3 million m3 to salvage dead and dying trees as well as to minimize the spread of beetles.
- Private timber harvests account for another five to six million m3 of annual production and are over and above the provincial timber harvest.
- The B.C. coastal log harvest has a mixture of hemlock, balsam, Douglas fir, western red cedar, yellow cedar (cypress), sitka spruce and hardwood;
- A greater proportion of western red cedar, Douglas fir and hardwood species has been harvested since the 1997 Asian crisis as they were more recession-proof species;
- The harvest increase in 2003 was a function of stronger U.S. and Japanese markets (and despite duties on Canadian lumber export).



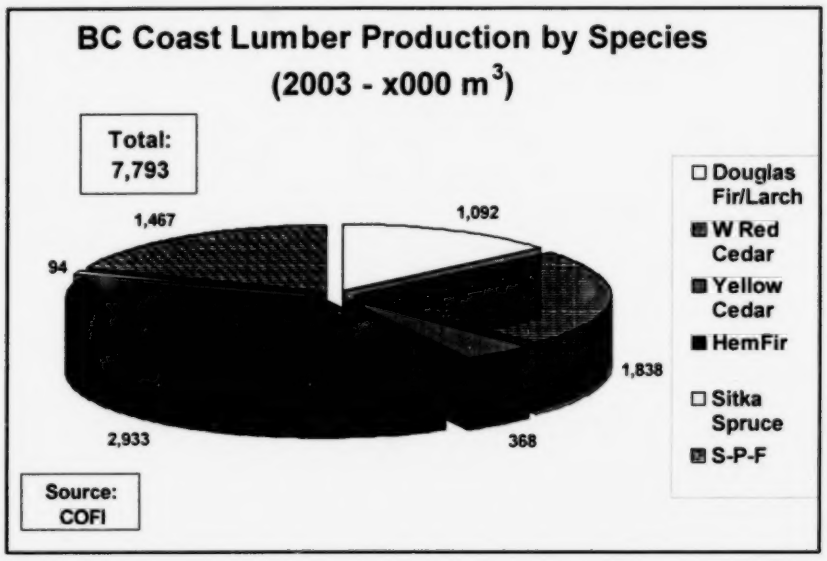
2.3.2 B.C. Lumber Production

An overview of B.C. lumber production is provided below.

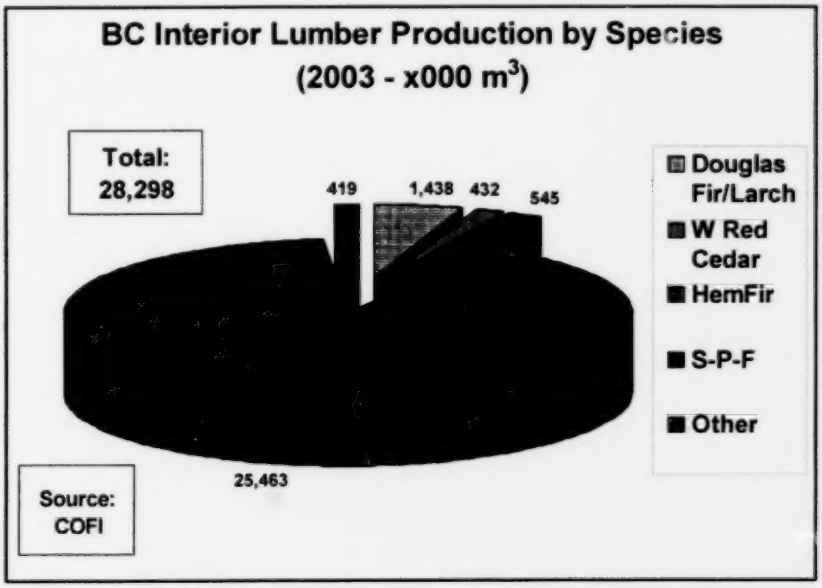
- B.C. lumber production peaked at 16 billion board feet (38 million m3) in 1987 generally declined in the 1990s. However, output has been higher since 2001 and reached 15.29 billion bf in 2003.
- B.C. coastal lumber production was 2.5 billion bf in 2002 but rebounded to 3.3 billion bf in 2003.
- B.C. Interior lumber production reached 11.99 billion bf in 2003 – most of the increase occurred in the second half of the year as both U.S. and Japanese prices improved.


B.C. Softwood Lumber Production
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
(Million bf)
80
82
84
86
88
90
92
94
96
98
00
02
Interior
Coast
Source:
COFI/MoF

- B.C. coastal production has especially been hard hit since the Asian economic crisis in 1997 and only rebounded starting in 2003.
- The majority of lumber production is hemlock and balsam fir, followed by western red cedar and Douglas fir;
- The lumber production by species does not generally match the timber profile, as generally higher margin western red cedar, yellow cedar, sitka spruce and Douglas fir are being logged and hemlock and balsam are being avoided where possible.



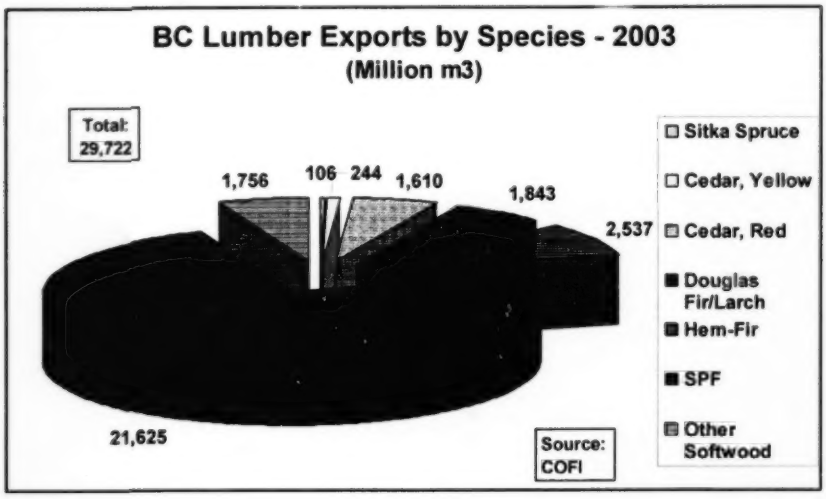
- B.C. Interior output slowed between 1996 and 2000 during the tenure of the Softwood Lumber Agreement;
- The B.C. Interior accounted for 78.5% of B.C.'s total lumber output of 15.3 billion bf (36.1 million m3) in 2003;
- Aside from one plywood mill and two veneer mills on the B.C. Coast, the majority of the plywood production (11 mills) and OSB (3 mills) are in the Interior of the province;
- The main Interior species produced is spruce-pine-fir (SPF), mainly as dimension lumber and studs for the U.S. market as well as Japan;



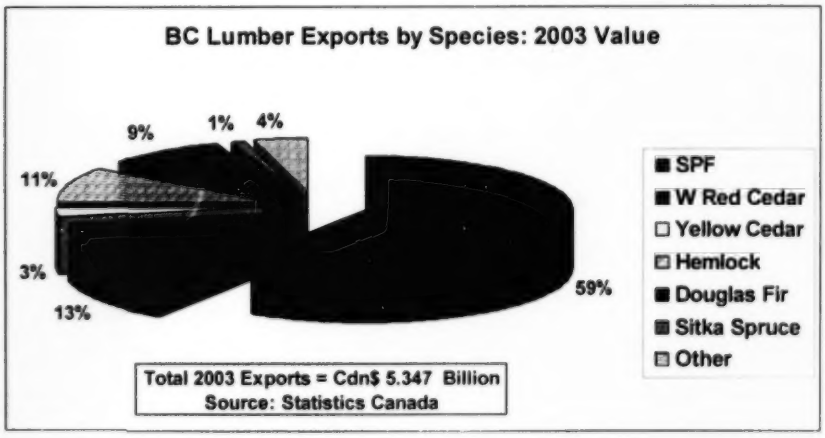
2.4 B.C.'s Product Mix

An overview of B.C. exports by products is provided below.

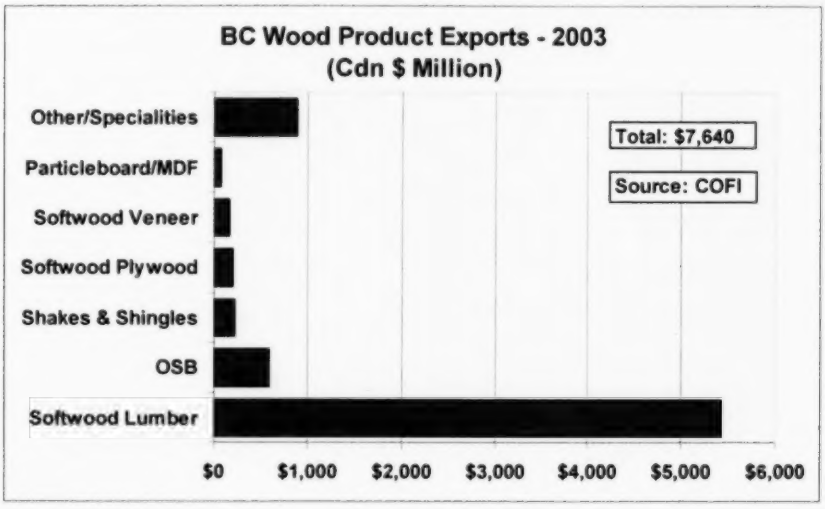
- B.C. lumber exports (volume basis) by species are led by SPF (spruce, pine fir, with a 73% species export share), and coastal structural whitewood (largely hemlock – balsam fir – 8.5% and Douglas fir – 6.2%) as well as western red cedar (5.4%).



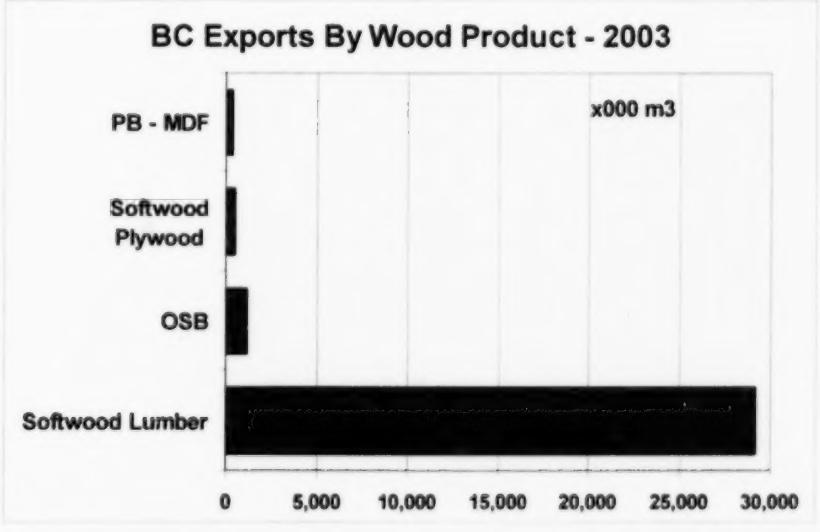
- B.C. lumber exports (value basis) by species follow the same volume trend with one major exception: SPF (spruce, pine fir) has a leading 59% species export share) and western red cedar is second with a 13% share. Coastal structural whitewood (largely hemlock – balsam fir represents 11% and Douglas fir had 9%.



- B.C.'s total wood product exports (value basis – excluding pre-fabricated homes) show the importance of softwood lumber as compared to panels or other products.



- B.C.'s total wood product exports (volume basis – excluding specialty products and pre-fabricated homes) show the importance of softwood lumber as compared to panels or other products.



2.5 B.C.'s Main Markets

A profile of B.C.'s main commodity wood products exports by market is provided below (volume basis, or products that are measured in cubic meters - excluding pulp and paper as well as specialty products). The U.S. and Japan represent almost 95% of B.C. commodity wood products exports by volume.

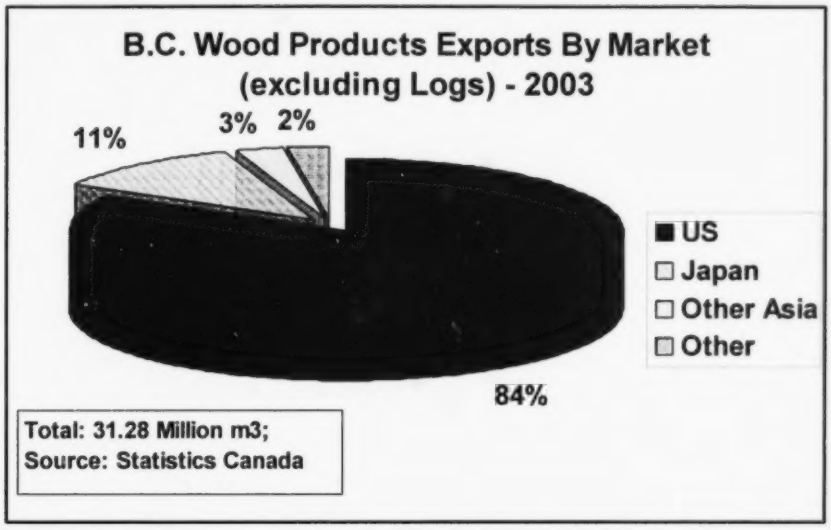
Summary of BC Commodity Wood Products - 2003

(x000 m3)

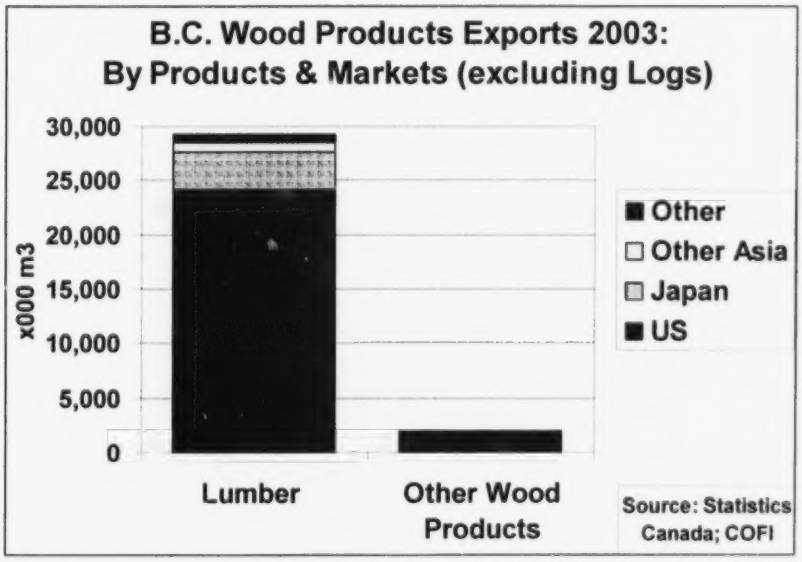
	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Total	% of Exports	Softwood Logs
Production	36,086	1,721	1,795	199	264	40,064		77,172
Shipments to Canada	6,886	1,206	602	40	73	8,808		73,079
Exports:								
US	24,207	424	1,078	151	185	26,045	83.3%	1,865
Japan	3,414	78	91	0	5	3,589	11.5%	1,690
S.Ko rea	109	0	7	0	0	116	0.4%	431
Taiwan	260	0	1	2	0	263	0.8%	8
China	203	1	10	4	0	218	0.7%	72
Other Asia	260	0	0	0	0	260	0.8%	0
Europe	398	11	0	1	0	409	1.3%	0
Other	349	1	6	1	0	356	1.1%	28
Total Exports	29,199	514	1,193	159	190	31,256	100.0%	4,093
% Exports	81%	30%	66%	80%	72%	78%		5%

Source: Statistics Canada, COFI, WOOD Markets

- The breakdown of B.C. wood products exports by market in 2003 shows the heavy dependence B.C. has on the U.S. and Japan.
- Growing new markets to diversify B.C. wood products exports into new markets is becoming a key initiative and requirement for B.C.'s future success, but there is a long way to go.
- Asian markets appear to offer the greatest opportunities for new growth in B.C. wood products exports, especially in China, Taiwan and South Korea. India is another market that could offer significant growth opportunities but that may take longer that initially thought. Other markets may lie in Vietnam, Thailand and the Philippines.
- Three products account for over 99% of B.C. commodity wood products: softwood lumber is the major export product with an 93.7% export market share followed by OSB with 3.8% and softwood plywood at 1.6%;
- Softwood log exports represent another 4.09 million m3. Note that about 95% of the B.C. log harvest is processed into finished wood products (lumber and plywood) as well as into a variety of residual products (33% of logs yield wood chips and another 12% as sawdust) that are used in the production of pulp, paper, particleboard and MDF.



- B.C.'s commodity wood products exports are heavily tied to lumber.
- Aside from lumber, only plywood products have shown significant growth in offshore export markets, but recent competition from Brazil in Europe and South-east Asia in Japan has reduced exports. However, plywood and OSB exports continue to gain in the U.S. market.
- Future growth will likely be based on commodity products but some growth could be tied to a variety of specialty and value-added products that fit both established and emerging markets.



3 SUMMARY OF B.C. EXPORTS BY MAJOR MARKET

A high level overview by region or country is provided to highlight strategic market information, opportunities and threats for B.C.'s wood products exports in nine key markets. The volume market share is related to commodity lumber and panels (products measured in cubic meters) and excludes all other specialty products as well as logs. These ten markets represent 98.3% of B.C.'s commodity wood products exports as summarized below.

BC Commodity Products Exports by Top 10 Market - 2003 (m3)

Rank	Market	Softwood Lumber	Softwood Plywood	OSB	MDF/ Fiberboard	Particle-board	Total	Export Market Share
1	United States	23,992,171	502,753	1,628,417	171,328	185,040	**26,479,709**	**83.53%**
2	Japan	3,421,882	77,982	91,327	148	5,410	**3,596,749**	**11.35%**
3	Taiwan	263,508	-	724	1,977	-	**266,209**	**0.84%**
4	China, P. Rep.	205,401	575	9,895	4,368	-	**220,239**	**0.69%**
5	Hong Kong	162,549	-	-	1,241	-	**163,790**	**0.52%**
6	Australia	124,650	-	168	-	36	**124,854**	**0.39%**
7	Korea, South	107,967	46	6,900	77	-	**114,990**	**0.36%**
8	Saudi Arabia	110,562	-	-	40	-	**110,602**	**0.35%**
9	Italy	105,590	956	-	-	-	**106,546**	**0.34%**
10	United Kingdom	87,268	8,971	-	86	-	**96,325**	**0.30%**
	Top 10	28,581,549	591,283	1,737,431	179,265	190,486	**31,280,014**	**98.67%**
	All Europe	399,829	10,996	18	563	-	**411,406**	**1.30%**
	Total	**28,997,983**	**593,597**	**1,737,812**	**181,980**	**190,486**	31,701,858	**100%**
	Product Share	**91.5%**	**1.9%**	**5.5%**	**0.6%**	**0.6%**	**100%**	

Source: Stats Can

Note: Includes 446,000 m3 of specialty grade lumber and panels

The U.S. market accounts for 85.5% of all B.C. commodity wood products exports and Japan represents 11.35% - both markets represent almost 95% of all wood products exports from B.C. Out of the remaining 5% market share, China and Hong Kong combined represent the third largest destination for B.C. exports (1.5%) followed by Taiwan (0.84%). These five markets (U.S., Japan, and "greater China") account for almost 97% of B.C. commodity exports. By comparison, all of Europe represents a mere 1.3%.

Lumber accounts for 91.5% of B.C. commodity wood products exports followed by OSB at 5.5% and softwood plywood at 1.9%. MDF and particleboard account for 0.6% market share each.

When the U.S. market is excluded, the importance of Japan emerges, as it represents almost 69% of total offshore commodity wood products exports.

BC Commodity Products Exports by Market (Excluding the USA Market) - 2003 (m3)

Rank	Market	Softwood Lumber	Softwood Plywood	OSB	MDF/ Fiberboard	Particle-board	Total	Export Market Share
1	Japan	3,421,882	77,982	91,327	148	5,410	3,596,749	68.87%
2	Taiwan	263,508	-	724	1,977	-	266,209	5.10%
3	China, P. Rep.	205,401	575	9,895	4,368	-	220,239	4.22%
4	Hong Kong	162,549	-	-	1,241	-	163,790	3.14%
5	Australia	124,650	-	168	-	36	124,854	2.39%
6	Korea, South	107,967	46	6,900	77	-	114,990	2.20%
7	Saudi Arabia	110,562	-	-	40	-	110,602	2.12%
8	Italy	105,590	956	-	-	-	106,546	2.04%
9	United Kingdom	87,268	8,971	-	86	-	96,325	1.84%
	Top 10	4,589,378	88,530	109,014	7,937	5,446	4,800,305	91.92%
	All Europe	399,829	10,996	18	563	-	411,406	7.88%
	Total	5,005,812	90,844	109,395	10,652	5,446	5,222,149	100%
	Product Share	95.9%	1.7%	2.1%	0.2%	0.1%	100%	

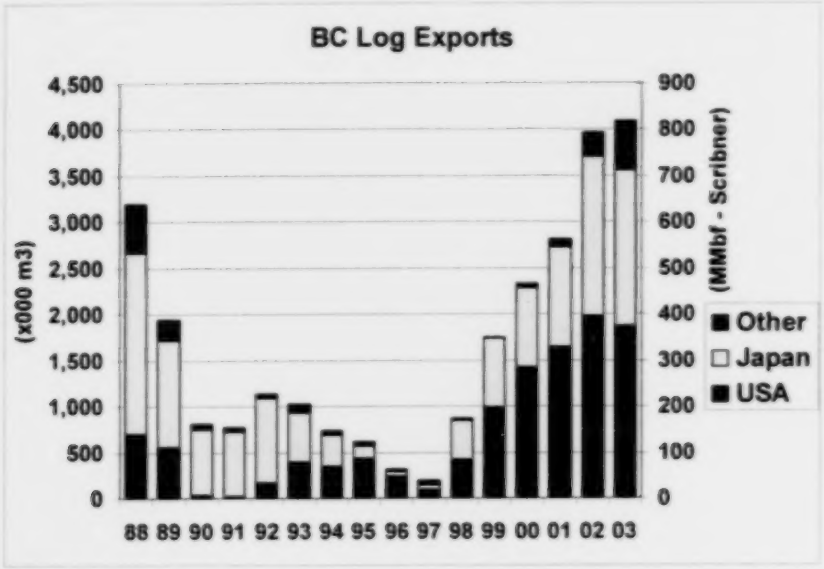
Source: Stats Can

The top 10 offshore markets represent almost 92% of total B.C. exports. Softwood lumber accounts for almost 96% of all offshore product sales followed by OSB (2.1%) and softwood plywood (1.7%). When lumber is not considered, there are only two product/market combinations that have exports exceeding 10,000 m3 – softwood plywood and OSB exports to Japan both exceed this limit (which by international standards is a very small volume threshold). Consequently, when the U.S. and Japan markets and softwood lumber as a product are all excluded from the evaluation, there are no export markets where B.C. has developed a market share that offers any critical mass or strong position. The only exception appears to be China, as export volumes OSB have been increasing (plywood exports to the U.K are high but these volumes are a fraction of where they were just five years ago).

From this preliminary evaluation, it appears that B.C.'s strength in export markets is still centered on the U.S. and Japan with other Asian countries offering the greatest potential for growth. Softwood lumber remains the most competitive product in export markets and this is even more evident in offshore markets.

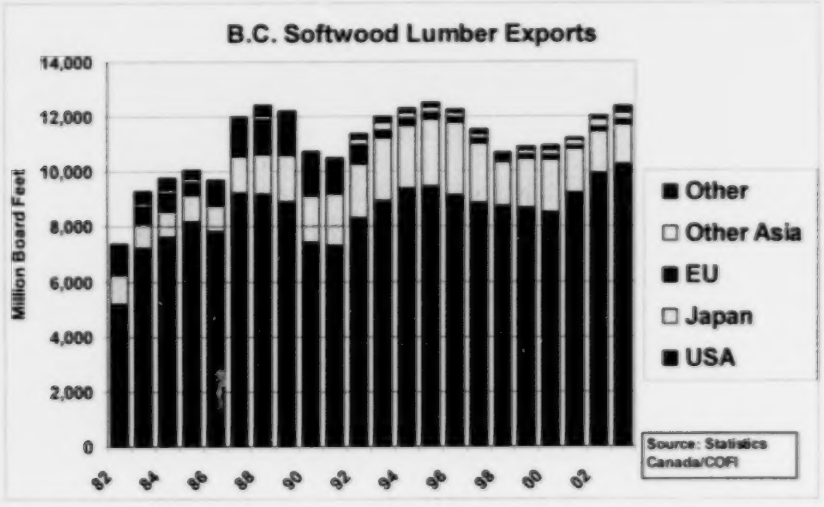
Summaries of B.C. exports are summarized for the logs (1988 to 2003) and by wood products (softwood lumber, softwood plywood, MDF and particleboard) for the period 2001 to 2003.

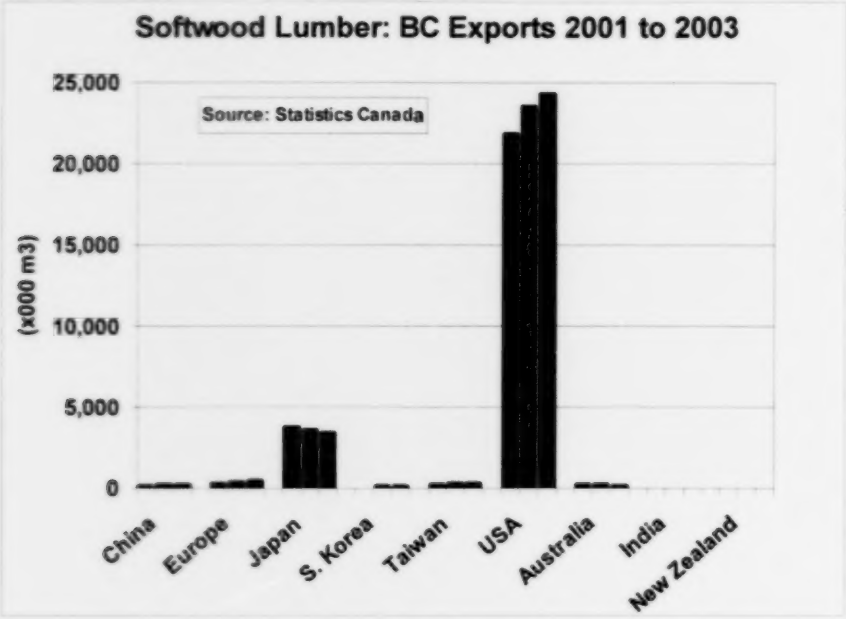
Log exports are led by the U.S. (especially since 1997) and Japan.



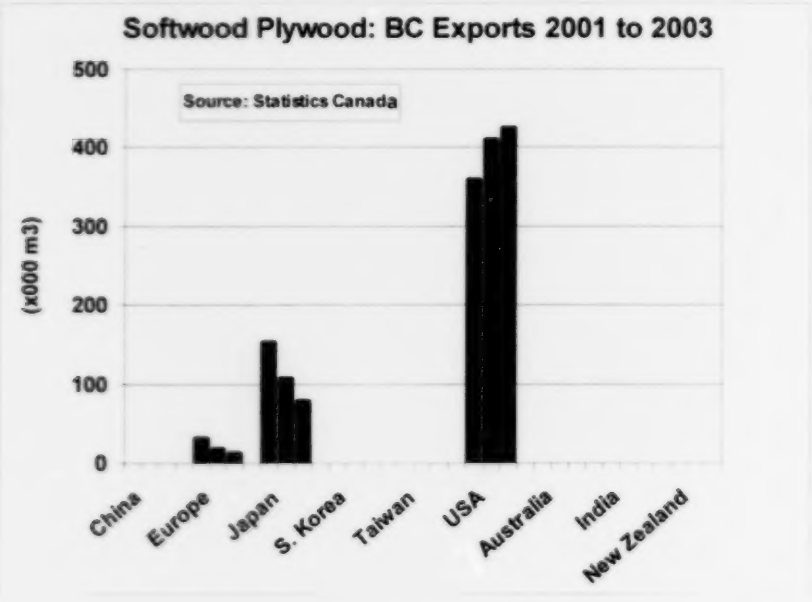
Source: COFI

Softwood lumber exports are led by the U.S. and continue to increase. Japan is the other major market and small but high valued coastal grades are shipped to Europe.

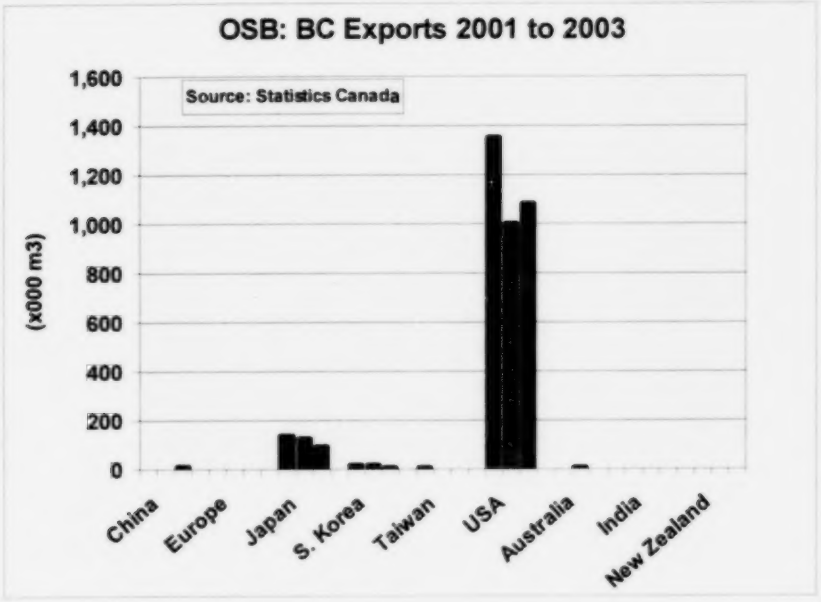




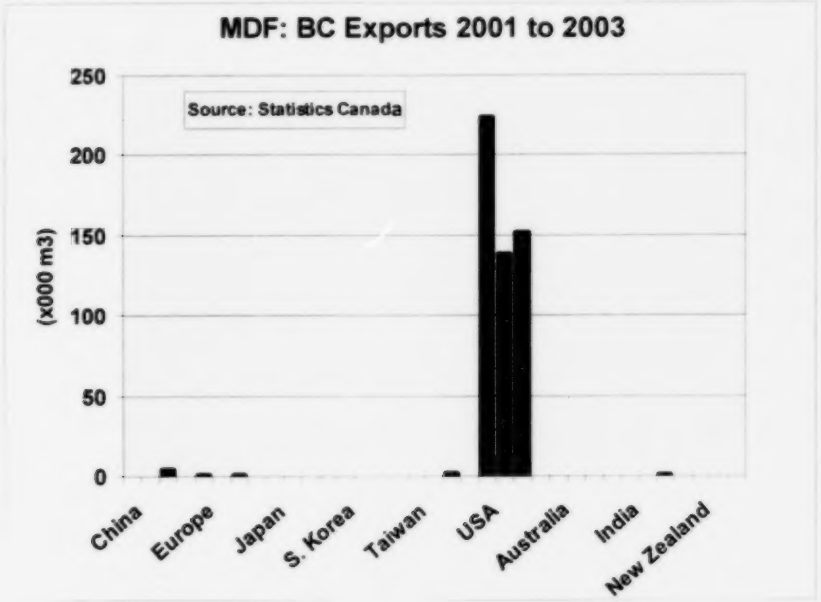
Softwood plywood exports have dominated by the U.S. in the 2000s as plywood exports to Japan erode and the once stronghold market of Europe has declined to almost nothing. Brazil has emerged as the major competitor to B.C. in both Europe and the U.S. market.



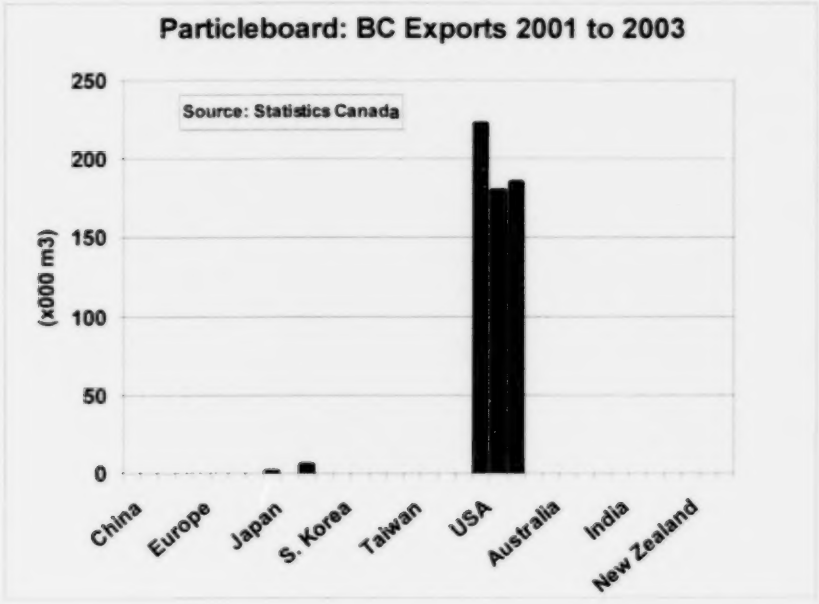
B.C. OSB exports continue to be dominated by the U.S. market. Japan remains the only notable market and European exporters have been infiltrating this market at B.C.'s expense.



B.C. MDF exports are small and are restricted to the U.S. market (note: 2001 – Statistics Canada; 2002-2003 – Industry Estimates).



The same story for MDF holds for particleboard exports – small volumes are dominated by shipments to the U.S.



3.1 USA

3.1.1 B.C. & Canada Market Share

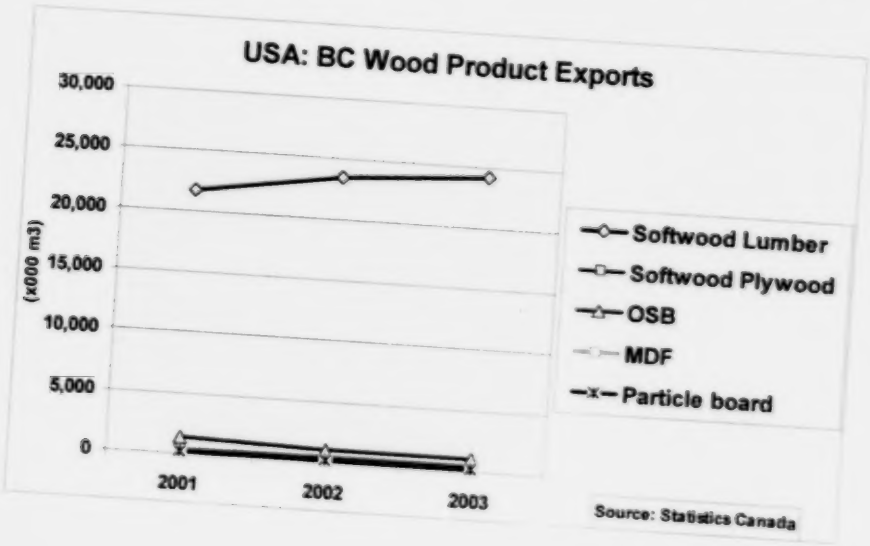
- The U.S. is the largest wood products market in the world and construction grade products dominate U.S. consumption as well as B.C. exports. The U.S. is also the major market for B.C. value-added and specialty products.

Summary of BC Exports by Major Market - 2003

Country:	USA							
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other*	Total
Total Consumption	(x000 m3)	134,165	13,824	19,581	4,161	8,176		179,907
Domestic Prod'n	(x000 m3)	86,148	13,014	12,049	2,846	7,051		121,107
Total Exports	(x000 m3)	2,219	363	513	143	388		3,625
Total Imports	(x000 m3)	50,236	1,172	8,045	1,458	1,513		62,425
Imports from Canada	(x000 m3)	45,704	452	7,777	618	1,305		55,855
Imports from BC	(x000 m3)	24,207	424	1,078	151	185		26,045
BC Import Market Share	(%)	48%	36%	13%	10%	12%		42%
BC Consumption Share	(%)	18%	3.1%	5.5%	3.6%	2.3%		14%
Imports from Canada	(Million $)	6,713	225	2,720	272	297	N/A	11,582
Imports from BC	(Million $)	3,746	225	573	48	31	1,355	5,976

* Other - Limited to Doors, Windows, Moulding, Millwork, Hardwood Flooring & Furniture
Source: Statistics Canada, COFI, WOOD Markets

Over the last three year, B.C. exports to the U.S. have been growing steadily and have been led by softwood lumber.



The low volumes of panel product exports in comparison to lumber are a direct result of a limited number of plant operations in B.C. as compared to the very large number of sawmills.

3.1.2 Economic & Business Trends

- The U.S. economy will likely grow at a slower rate during the second half of 2004 than predicted earlier in the year. The consensus forecast expects year-over-year growth in real GDP to an average 4.3% in 2004, down from their previous prediction of 4.6%. Much of the downward revision comes from a cut in the projection for growth in the third quarter, now expected to average 3.5% at an annual rate, down from 4.1% in the survey of three months ago.
- GDP projections of 4.3% in 2004 and 3.7% in 2005 are projected (although subsequent forecasts are already downgrading this forecast closer to 3.5%).
- New housing construction, which accounts for more than a third of U.S. annual consumption of softwood sawn wood and structural panels and for substantial volumes of other softwood and hardwood products, remained high through 2003 and through the first eight months of 2004.
- The National Association of Home Builders (NAHB) forecasts calls for the housing sector to remain strong with starts and sales ending in 2004 slightly above 2003 levels to 1.92 million in 2004 and dropping slightly to 1.82 million starts in 2005. Other forecasters are now indicating that 2 million units may be reached before falling to under 1.85 to 1.9 million units.
- Investment in residential repair and remodeling kept pace with the strong new residential construction market in 2003 that continued into 2004. Expenditures for improvements and repairs of residential properties were at a seasonally adjusted annual rate of $198.8 billion in the first quarter of 2004. This estimate is 19.3% above the fourth-quarter 2003 estimate of $166.7 billion. Expenditures for maintenance and repairs to all properties amounted to a seasonally adjusted annual rate of $54.4 billion during the first quarter of 2004, increasing over $40.1 billion in the fourth quarter of 2003. Improvements amounted to $144.4 billion in the first quarter of 2004, exceeding the $126.6 billion in improvements during the fourth quarter of 2003.
- Two of three indicators of demand for wood products increased in the first two quarters of 2004 relative to 2003 (USDA-FAS):
    - Industrial production—an important demand determinant for pallet lumber, containerboard, and some grades of paper—increased 7.2% in 2004, to 103.9% of its 1997 average; second quarter production was up after posting gains early in the first quarter of 2004.
    - Furniture and related products—a determinant of high-grade lumber production—increased 3.8% in the first two quarters of 2004 compared to 2003.

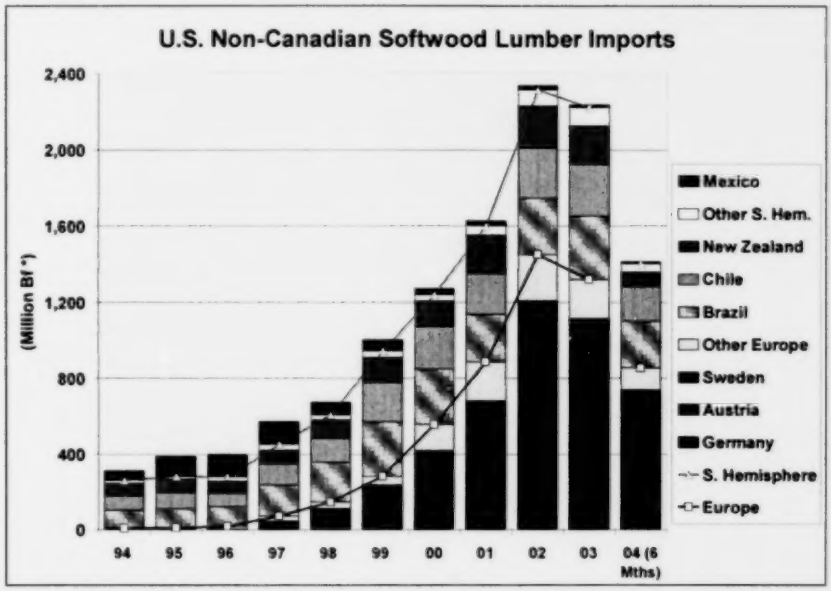
- Paper products output—a determinant of pulpwood and wood residue use, as well as recycled fiber availability and use—remained unchanged during the first two quarters of 2004 compared with the same period in 2003. The index (1997 = 100) of paper products output for the first half of 2004 remained at 93.4.

- In summary, housing starts will remain strong in 2004, after a very strong showing in 2003; activity in the principal markets for U.S. timber was also slightly higher in 2003 than in 2002. After a strong start during the first two quarters of 2004, growth is expected to moderate but remain steady for the rest of the year. Although the rate of growth is expected to slow, most analysts predict that conditions favorable to the growth of timber markets will continue.

3.1.3 Domestic and Imported Wood Products Trends/Issues

- U.S. softwood lumber imports had increased 11.4% during the first 8 months of 2004 relative to the same time period a year ago. The volume of Canadian lumber imports increased by 9.0% over this period. Canadian imports constituted 91% of all softwood lumber imports.

- Exporters in Europe and the Southern Hemisphere continue to expand their share of the U.S. market - imports through the first 8 months of 2004 were up by 62%.



- Total softwood lumber imports were 21.3 billion bf (50.3 million cubic meters) in 2003, an increase of 1.4% over 2002.
- During the first 8 months of 2004, U.S. exports decreased 14.5% compared with exports for the same period in 2003. Exports to Canada increased by 9.0%, exports to Japan fell 20%, and exports to Mexico fell 38%.

- U.S. production of softwood lumber increased by 6% in the first 8 months of 2004 compared with the same period in 2003. In 2003, 36.5 billion bf (86 million cubic meters) of softwood lumber was produced. Production of softwood lumber for 2004 is forecast to be slightly higher (5 to 6%) than 2003 levels led by stronger output from the West Coast and U.S. South regions.
- Softwood plywood production was 14.7 billion sf (13.0 million cubic meters) in 2003 - this was 3% lower than in 2002. The volume of softwood plywood production fell throughout the 1990s, and the decline continued in 2003. Softwood plywood production for the first 8 months of 2004 increased by 1.1% compared with the same period in 2003 and is expected to be about 1% higher for all of 2004.
- Softwood plywood imports and exports varied inversely in 2003 compared with 2002 data: imports rose sharply by 43% and exports declined 6.5%. Softwood plywood imports had increased by almost 100% and exports had decreased by 3% for the first 8 months of 2004.
- Plywood exports to Canada increased by 20% during the first 8 months of 2004 and plywood imports from Canada had also increased by 20%. Given these estimates, apparent consumption of plywood is estimated to increase by 8% in 2004, even as more market share for structural panels continues to be taken by oriented strandboard (OSB).
- OSB production for the first 8 months of 2004 was 4.8% higher that in the first 8 months of 2003. In 2003, 13.6 billion sf (12.0 million cubic meters) of OSB was produced, compared with 13.4 billion sf (11.8 million cubic meters) in 2002. Between 1996 and 2000, OSB capacity grew rapidly in the United States and Canada—by 25% in 1996, 5% in 1997, 5% in 1998, and 3% in 1999; it remained level in 2000 and 2001. Despite the growth in capacity and high demand, prices during the eight months of 2004 have hit record highs.

U.S. SOFTWOOD PLYWOOD IMPORTS
Thousand Sq. Ft. 3/8" Basis

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Brazil	5,067	8,417	2,341	5,735	8,437	7,543	112,594	66,203	141,494	268,930	578,240
Canada	18,033	23,463	27,990	33,612	44,070	118,388	274,084	285,941	432,979	486,480	510,890
Chile	0	51	47	0	125	10,964	40,600	38,958	82,418	129,510	176,360
China, Rep	0	0	0	0	87	170	107	90	9,962	6,260	13,770
Russian Fed	0	1,149	4,621	0	0	1	10	191	3,094	693	6,380
Finland	0	0	0	0	0	0	0	0	0	233	5,250
Argentina	0	0	0	43	0	0	160	20	130	5,490	4,481
Mexico	1,481	2,710	18,264	34,823	38,857	23,889	23,092	11,116	4,928	3,500	2,484
Malaysia	0	0	1,953	843	2,665	5,135	8,178	7,726	9,160	3,040	2,138
Guyana	0	0	0	0	0	836	357	851	1,582	1,505	977
Indonesia	15,810	10,524	4,109	6,231	6,088	5,757	860	2,141	1,268	1,413	581
Thailand	0	0	0	21	0	28	123	528	4,108	0	62
Other	319	810	209	3,865	3,452	6,338	9,126	8,669	3,031	256	4,267
Total Plywood Imports	**40,709**	**47,124**	**59,534**	**85,173**	**103,781**	**179,050**	**469,291**	**422,434**	**694,152**	**907,310**	**1,305,880**

U.S. OSB IMPORTS
Thousand Sq. Ft. 3/8" Basis

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Canada	2,162,627	2,587,623	2,844,582	4,414,560	5,272,510	6,479,620	7,324,800	7,597,700	8,018,370	8,238,600	8,788,400
Ireland	0	0	0	0	0	19,980	34,350	8,640	21,990	88,250	113,380
Germany	0	0	0	20	100	0	110	160	1,100	56,570	71,670
Brazil	0	0	0	0	0	0	0	0	0	In Other	45,470
France	0	0	0	0	0	0	0	24,970	42,330	76,990	42,550
Chile	0	0	0	0	0	0	0	0	0	In Other	18,140
Poland	0	0	0	0	0	0	0	0	8,670	5,960	126
Other	0	10	118	110	10	10	10	100	7,010	4,870	11,204
Total OSB Imports	**2,162,627**	**2,587,633**	**2,844,700**	**4,414,690**	**5,272,620**	**6,499,610**	**7,359,270**	**7,631,570**	**8,099,470**	**8,471,240**	**9,090,940**

Source: APA, USDA

- In 2003, structural panel consumption increased 2.2% to 38.2 billion sf (33.8 million cubic meters). OSB consumption was a record 22.5 billion sf (20.0 million cubic meters) and constituted 59% of the structural panel total. About a quarter of this increase can be explained by the higher levels of housing starts. OSB consumption is expected to continue to exceed plywood consumption.
- Particleboard and medium density fiberboard (MDF) production both declined during 2003. Particleboard production was 7.1 million cubic meters, a decrease of 8.5%, and MDF production was 2.7 million cubic meters, a decrease of 6.3%. Prices of particleboard strengthened in 2004 allowing MDF to inch higher as well. During the first 8 months of 2004, particleboard imports decreased by 10.1% and MDF imports increased by 42.4% on a volume basis.

3.1.4 Major Import Suppliers/Competitors to the Market

- Canada remains the dominant supplier to the U.S. in all major commodity wood products. The only exception is in softwood plywood where Brazil exceeded Canada shipments to the U.S. for the first time in 2003, as well as in MDF.
- Major Competitors to Canada by Major Product in 2003:
  - Softwood Lumber:
    - B.C. Market Share of Consumption = 18%;
    - Import Market Share = 48% while Canada collectively has a 91% import market share.
    - The competition to B.C. exporters include U.S. domestic production; Europe (mainly structural lumber and boards; 6% import market share) and Southern Hemisphere (appearance pine lumber; 4% market share).
  - Softwood Plywood/OSB:
    - B.C. Market Share of Consumption from its ten plywood and three OSB mills: Plywood = 3.1%; OSB = 5.5%;
    - Import Market Share: Plywood = 36%; OSB = 13%.
    - Canada has a 39% share of softwood plywood imports and 97% share of OSB imports.
    - Competition includes U.S. domestic production; Brazil and Chile (plywood; together equal over 70% of imports); increasing European as well as Brazilian OSB.
  - Particleboard/MDF:
    - B.C. Market Share of Consumption from its two particleboard and one MDF mills: Particleboard = 1.6%; MDF = 2.3%;
    - Import Market Share: Particleboard = 12%; MDF = 5%).
    - Canada has a declining share of imports: 86% of particleboard and 42% of MDF.
    - Competition includes: U.S. domestic production; European particleboard; Southern Hemisphere & European MDF as well as some Chinese production.
  - Specialty/Value-Added:
    - Competition is mainly U.S. domestic production;
    - Also, Europe, Asia and especially China offer increasing supplies;
    - Southern Hemisphere provides the bulk of the U.S.'s clearwood pine lumber, mouldings and millwork.

3.1.5 Factors Impacting Import Growth for Wood Products

- The strengthening Canadian dollar in 2004 and especially in October/November 2004 to well over US$0.80 will weaken the competitiveness of Canadian exporters to the U.S.
- Higher interest rates are forecast for 2005 (2% to 3% higher than the low of 2% reached by the Federal Reserve in 2004) and this is expected to have some negative impact on housing starts later in 2005.
- The U.S. is the largest consumer market for wood products and best market for Canadian wood products with the only limitation being countervailing and anti-dumping duties on Canadian softwood lumber exports.
- The U.S./Canada softwood lumber dispute may be closer to being resolved by first quarter 2005, but the ongoing legal challenge is expected to continue unless a negotiated settlement can be engineered.
- Total U.S. structural lumber and panel market demand is projected to continue to grow during next ten years at an average annualize rate of about 1 to 2% supported by strong demographics for new residential housing. However, a slight slowdown is forecast for 2005.
- In the U.S. softwood lumber market, European lumber and panel exporters are gaining market share despite the fact that the euro appreciated 21% in 2003 and another 5% in 2004.
- Increased AAC allocations in the BC Interior to manage the beetle infestation are likely to push more mills to consider operating on a three-shift basis. Resulting lower operating costs and favorable stumpage rates on beetle-killed wood should offset some of the affects of the Canadian dollar appreciating against the U.S. dollar.
- B.C. softwood lumber mills are very competitive before AD/CVD duties. Ignoring possible reductions or negotiated settlement, duties added 27% to the cost of U.S. lumber exports starting in May, 2002. This more seriously affects remanufactured lumber products due to their much higher prices and subsequent duties. Exporters of value-added and high priced wood products had to pay extremely high duties on U.S.-bound shipments in markets where prices are generally more stable – this lead to some market share losses in a number of high priced products.
- Rail congestion and shortages of available trucks in the U.S. during late 2003 and first half of 2004 added to market anxiety and the perception of tight lumber and panel supplies. This may become a factor again in 2005 if demand stays high.

3.1.6 B.C. Market Opportunities and/or Initiatives for Further Growth

- The U.S. is B.C.'s largest market in every major product line and remains B.C.'s most important market
- Continued marketing effort and/or initiatives or monitoring are required in all product lines to support existing market positions against existing or emerging competitors and substitute products.
- Softwood lumber is the largest product line and the countervailing and anti-dumping duties are the single biggest threat to B.C.'s volume of wood product exports. This, however, can only be monitored.
- B.C. plywood is facing increasing offshore competition from Brazil, but the quality is much lower from Brazil.
- OSB remains a natural fit in the U.S. market and aside from small shipments in Western Canada, the U.S. is the key market for OSB.
- Particleboard and MDF have no real barrier to market access in the U.S. and most exports are shipped to the U.S.
- Specialty and value-added products will also be a strong fit with the U.S. market, but countervailing and anti-dumping duties are key issues for high valued exports.

The main sources of information used for the U.S. market analysis include: Statistics Canada; WOOD Markets Monthly newsletter; USDA-FAS; WWPA; industry magazines and newsletters, and other publications.

3.2 Japan

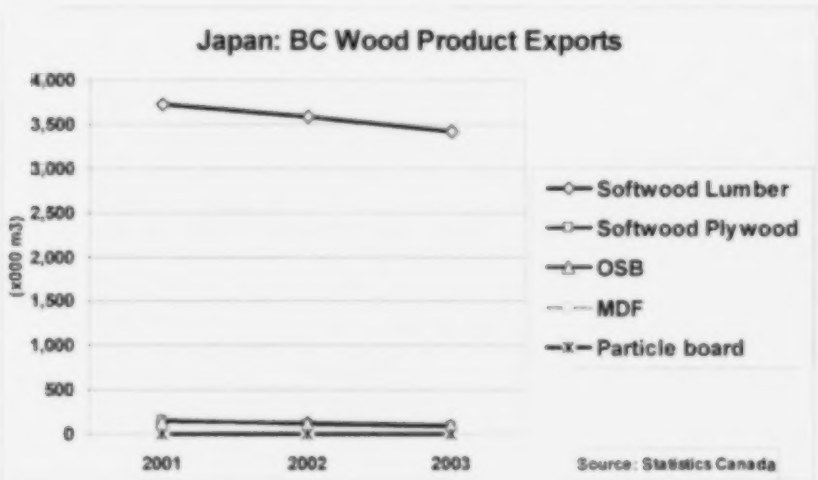
3.2.1 B.C. & Canada Market Share

- B.C. continues to have a large import market share in Japan of softwood lumber (42%), plywood (41%) and OSB (47%). However, each of these products' export volumes continue to erode as new competition continues to limit B.C.'s share.

Summary of BC Exports by Major Market - 2003

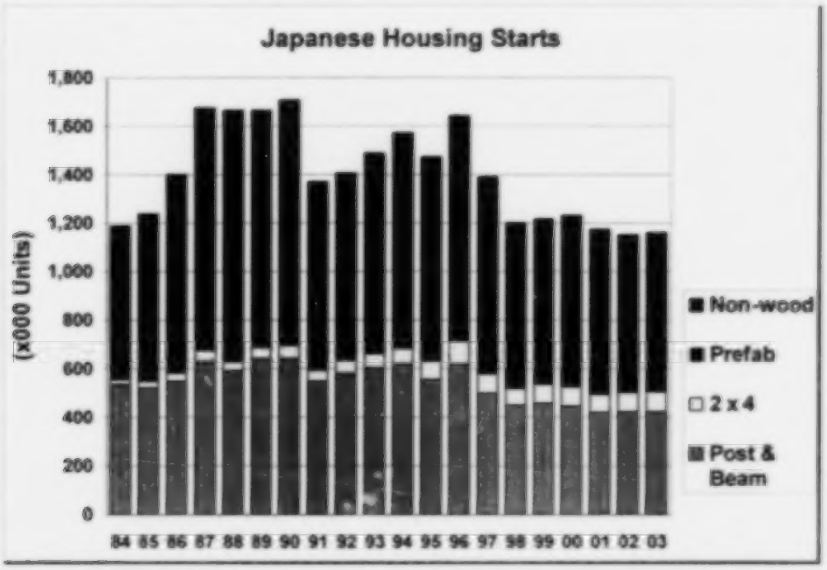
Country:	JAPAN							
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other	Total
Total Consumption	(x000 m3)	22,122	2,052	193	1,127	1,663		27,157
Domestic Prod'n	(x000 m3)	13,929	1,873	0.0	420	1,249		17,471
Total Exports	(x000 m3)	4	13	0.0	4	1.0		22
Total Imports	(x000 m3)	8,197	192	193	711	415		9,708
Imports from Canada	(x000 m3)	3,564	78	127	0.1	5.4		3,775
Imports from BC	(x000 m3)	3,414	78	91	0.1	5.4		3,589
BC Import Market Share	(%)	42%	41%	47%	0.0%	1.3%		37%
BC Consumption Share	(%)	15%	4%	47%	0.0%	0.3%		13%
Imports from Canada	(Million $)	1,167	31	34	0.5	3.7	N/A	1,412
Imports from BC	(Million $)	1,106	31	26	0.0	3.7	175	1,342

* Other - Limited to Doors, Windows, Moulding, Millwork, Hardwood Flooring & Furniture
Source: Statistics Canada, COFI, WOOD Markets



3.2.2 Economic & Business Trends

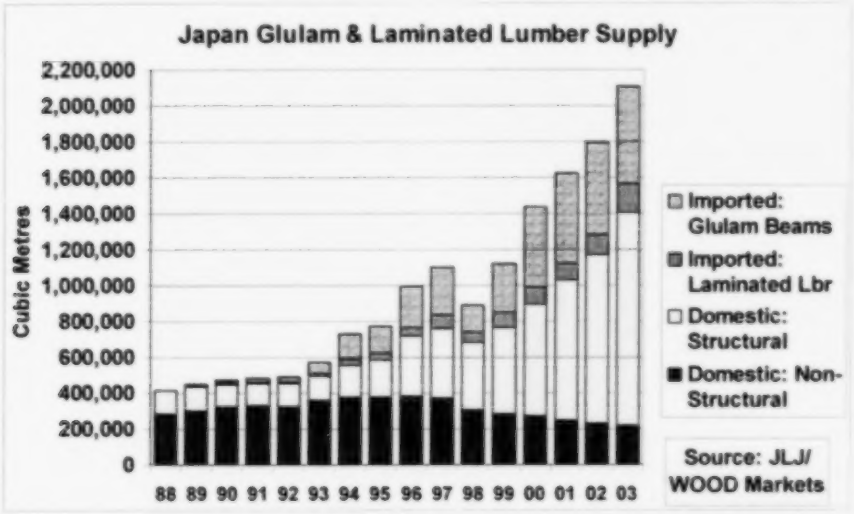
- Between 1995 and 2002, the Canadian dollar did not weaken as much to the Japanese Yen as the major exporting countries in Europe (Finland, Sweden and Germany) and the Southern Hemisphere (Chile, New Zealand and Brazil). This resulted in Canadian wood products becoming relatively more expensive in yen terms than wood products exported by these weaker-currency countries. This gave the weaker-currency countries a competitive advantage in the Japanese market compared to Canadian and U.S. wood products. The European countries in particular, made major inroads in gaining imported product market share in the Japanese market. Since mid-2002, this trend has reversed and by mid-2003, the Canadian dollar was much weaker against the euro as well as the U.S. dollar. This trend against European currencies has held in 2004 except the Canadian dollar has strengthened significantly to the U.S. dollar.
- Japanese interest rates continue to remain at very low rates but have not been enough to stimulate housing and wood products demand.
- Japan's GDP was 2.5% in 2003 – a marked improvement from negative growth of -0.3% in 2002. GDP of 4.3% is expected in 2004 but is forecast to be cut in half to around 2.0% in 2005.
- Japan has the second largest wooden housing market in the world after the U.S. and has a long established wood culture and has historically paid for quality.
- Japanese housing starts have declined by over 30% between 1997 and 2003. However, housing starts were more stable in 2003 and in 2004. Japanese housing starts in 2003 were 1,160,083 units, up slightly (+0.8%) from 1,151,016 in the previous year. During the first quarter of 2004, housing starts were 267,032, up 5.4% from the previous year as the housing market increased steadily before plateauing in third quarter.

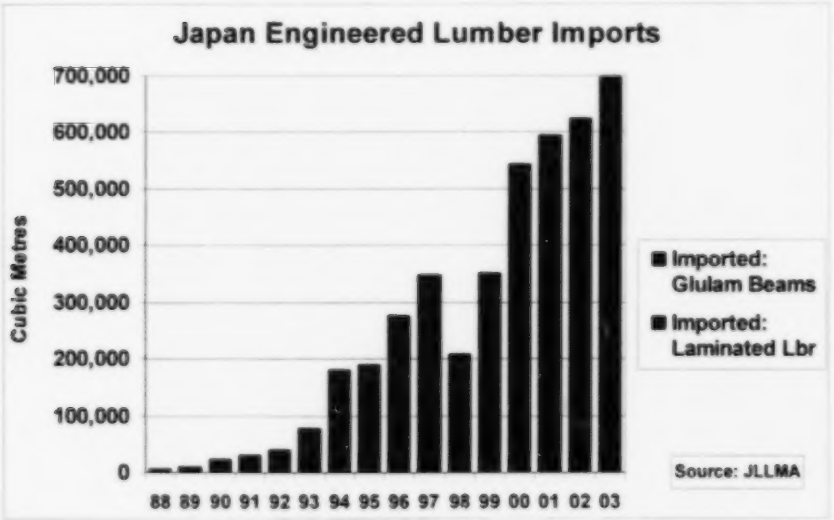


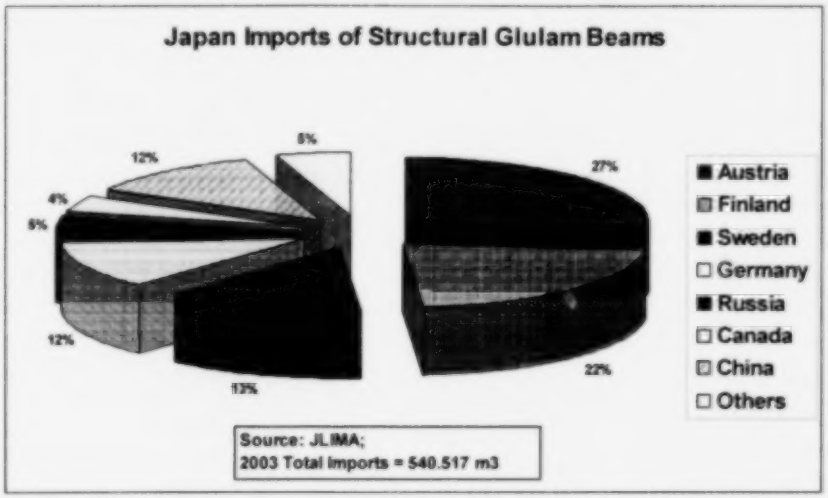
3.2.3 Domestic and Imported Wood Products Trends/Issues

- Japanese domestic lumber industry production suffered another setback in 2003 with reduced output. Japanese imports of softwood products from Europe continued to remain strong - softwood imports from Europe (excluding Russia) were 2.77 million m3) in 2003, up 10% from the previous year. Finland shipped over 1 million m3 of softwood products to Japan, including kiln-dried lumber and laminating stock for glulam products.
- Japan's total log supply to the wood manufacturing industry was 30.52 million m3 in 2003 (up 1.2%) from the previous year. The domestic supply included 15.17 million m3 (+0.5% from 2002) while imported logs represented 15.35 million m3 (-2.9%). Softwood logs accounted for 83% and temperate hardwood for 17% of domestic log supply, up 1.5% and down 4%, respectively. Softwood logs were principally from North America (6.14 million m3), Russia (5.35 million m3), and New Zealand (1.58 million m3).
- Japan's domestic sawn lumber production in 2003 was 13.90 million m3 (-3.3% from 2002).
- Plywood Japan's plywood production in 2003 was 3.02 million m3 (+9.7%) as compared to 2.75 million m3 in 2002 Traditional hardwood plywood production accounted for 38% and softwood plywood production accounted for 62% of production. Japanese plywood producers continue to shift to softwood plywood production. This remarkable growth in Japanese plywood output was from the industry's prompt compliance with formaldehyde testing requirements as compared to the many problems that offshore supplier encountered.

- Japanese laminated wood production in 2003 totaled 1.41 million m3 (+20% from 2002). This is largely a result of the continuing growth in demand for dried and dimensionally stable building materials. Production of structural glulam products continues to grow rapidly - the share of such structural products in 2003 was 84.6% of the total, up from 80.6% from 2002.







- Japanese softwood product imports from Europe (excluding Russia) grew 10% to 2.72 million m3 in 2003 while imports of structural glulam products grew 5% from the previous year to 540,517 m3.

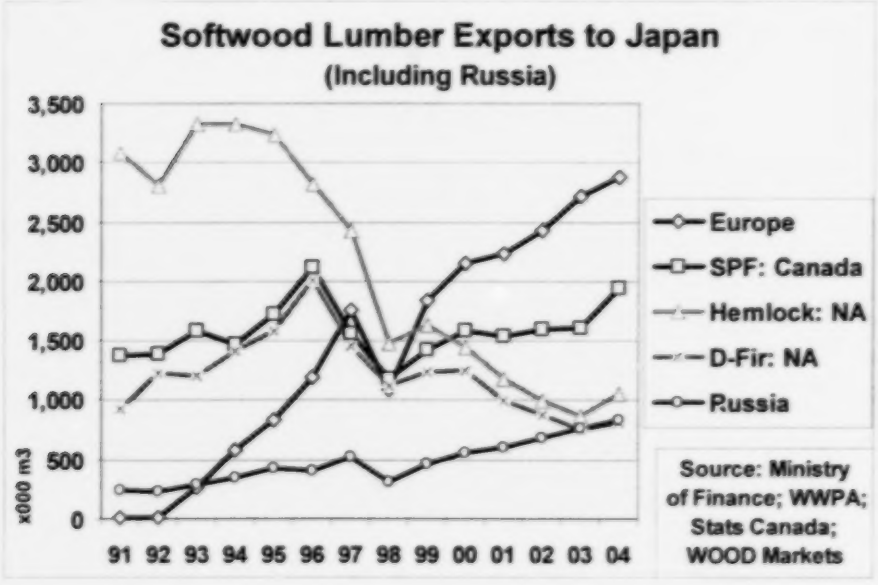
3.2.4 Major Import Suppliers/Competitors to the Market

- Major Competitors to BC by Major Product in 2003:
  - B.C. continues to have a large import market share in Japan of softwood lumber (42%), plywood (41% but eroding) and OSB (47%, but of a very small market volume).
  - Softwood Lumber: B.C. had a 42% import market share in 2003. Its main competitors were Europe (33% share), Russia (10%) , U.S. (4%), Southern Hemisphere, China (2%)as well as domestic producers using imported as well as domestic mills;
  - Plywood/OSB: B.C. had a 41% import market share of plywood and 47% in OSB in 2003. The other softwood plywood competitors included the U.S., Southern Hemisphere; China. Hardwood tropical plywood is a much bigger competitor, mainly form Indonesia, Malaysia and other Asian countries. Domestic plywood producers use imported logs and are the largest part of the market. OSB from Europe is increasing and is taking market share from B.C. and Canada
  - Particleboard/MDF: B.C. had a minor import market share in 2003. The main competitors are the Southern Hemisphere; China, and other Asian countries.
  - Specialty/Value-Added competitors are many and come from Europe, Southern Hemisphere, other Asia and especially China.
- Since 1998, changes in the Japanese building industry and wood product preferences have had a substantial impact on domestic and import wood product suppliers, and on

traditional market distribution channels. This has led to a number of major shifts in wood product import trends:

- Decreasing log imports from Southeast Asia and North America;
- Rising log imports from Russia and New Zealand;
- Decreasing lumber imports from North America;
- Decreasing plywood and OSB imports from North America;
- Rising lumber imports from Europe, Russia and China; and
- Rapid growth of glulam and laminated lumber products.

- B.C.'s loss of market share in Japan in 2003 is partly attributed to the hot market in the U.S. and this has limited B.C. exporters' interest in shipping to Japan at lower prices. However, the increases in SPF production in 2004 were a result of increased production that was made available from increases in the timber harvest of mountain pine beetle attacked timber.
- B.C. has lost competitiveness in the SPF segment to European and Russian spruce and pine exporter during the past ten years. Canadian SPF exports have generally been centered around 2x4 dimension market segment (J-grade). Canadians have not progressed beyond being a supplier of SPF 2x4 dimension/platform house segment. Europeans are producing a much wider range of SPF lumber products for a much broader SPF wood frame house market. Coastal structural hemlock/balsam has lost significant market share to European, Russian lumber and domestic sugi in the traditional home segment.



- There will be continued market share growth of glulam and laminated structural wood products, at the expense of green and dry solid structural lumber. As well, there will be growth in new, low-cost, Asian and Russian softwood and hardwood log, lumber and manufactured product supply sources — these new supply sources have significant transportation and manufacturing cost advantages over domestic Japanese

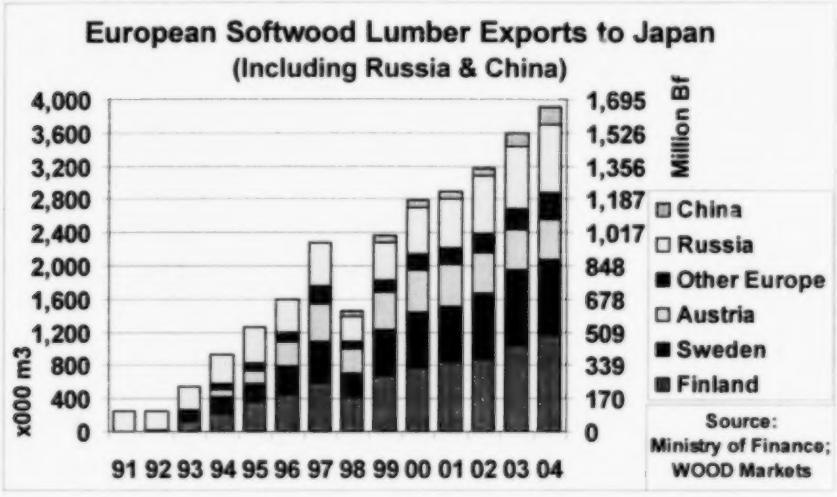
production and North American, European and Southern hemisphere imports. As a result, many Japanese wood products companies are being persuaded to relocate their manufacturing plants to China and Southeast Asia as well as to sawmills in Russia (near the China/Russia border).

- B.C. lumber opportunities will continue to be focused on 2x4 platform housing (SPF) and post-and-beam housing (coastal Douglas fir and hemlock).
- Through 2003 and into 2004, B.C. producers of plywood and OSB have struggled with justifying shipping product to Japan at consistent discounts (mill return basis) to the U.S. market. Even the most committed Japanese suppliers have reduced their Japanese allocations given the low prices being supplied by plywood exporters in South-East Asia and OSB producers from Europe.

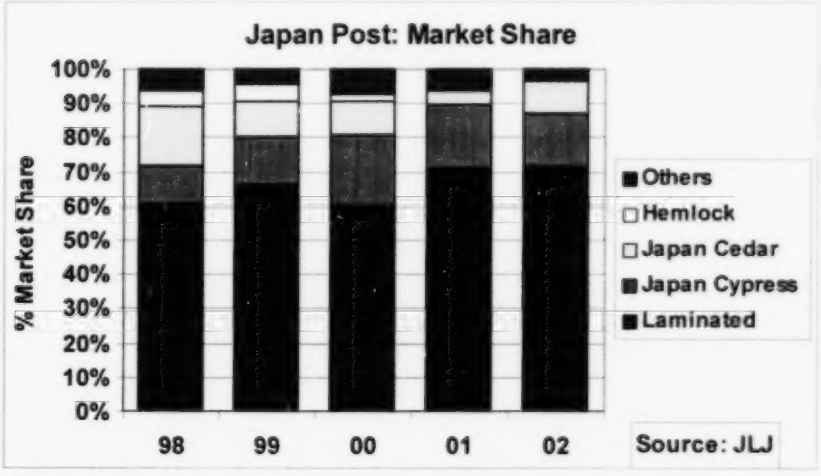
3.2.5 Factors Impacting Import Growth for Wood Products

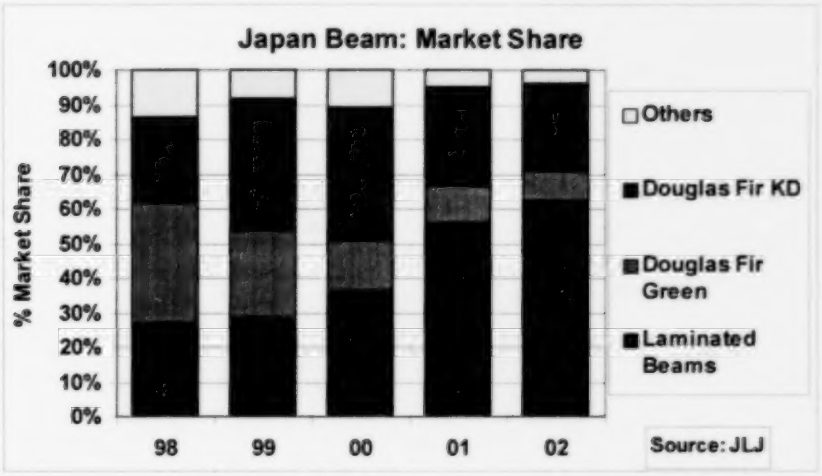
- Product Demand Changes
  - Wood product building material preferences in Japan have changed significantly as a result of the demonstrated variation in structural lumber performance abilities during the Kobe earthquake in 1995. An analysis of the impact of the earthquake on various types of building methods and materials led the Japanese government to introduce the Housing Quality Assurance Act in 1998, and a ten-year warranty on material specifications. These new building regulations and warranty requirements have encouraged builders to source stronger, more stable (e.g., kiln-dried and laminated) JAS-certified finished products, in place of less stable, green, solid, semi-finished products that had been the major lumber export from coastal B.C. sawmills. B.C. sawmills are gradually making the manufacturing changes needed to meet these new product standards.

  - Since the mid-90s, the European exporting countries have been very aggressive in pursuing the Japanese market/product advantages created by growing demand for higher quality products by producing increasing volumes of high quality spruce and pine kiln-dried and laminated products for structural application in the building of traditional Japanese post and beam homes. From 1993 to 2003, European exports to Japan of kiln-dried and laminated structural lumber products have grown from about 500,000 m3 per year to over 3 million m3 per year in 2003.



- Since the late 1990s, some of the major B.C. coastal producers of standard Japanese structural post and beam building products have installed dry-kilns to produce kiln-dried solid hemlock/balsam and Douglas fir posts, beams, etc. for the Japanese market. However, kiln dried solid hemlock/balsam and Douglas fir posts, beams, etc., are still considered inferior in regards to product stability, straightness and ease of handling compared to finger-jointed and laminated (i.e., engineered) European spruce and pine structural wood products.





- House building systems construction changes.
  - During this same period, the development of the CAD-design system approach to house-building, in combination with the new building regulations, standards and warranties, resulted in a major change in builder and consumer product preference for higher-quality wood products. House-building system automation (pre-cutting) has produced computer designed, system manufactured lumber specifications to meet the exact piece requirements of each house design. The nature of computer-controlled pre-cutting equipment requires the use of kiln-dried and engineered straight and stable lumber. Pre-cutters quickly realized that the use of green lumber (for posts, beams, etc.) or poorly dried lumber yielded unacceptable volumes of reject pieces from every package of green Douglas fir, hemlock/balsam and spruce. The cost implications of not being able to use close to 100% of the structural lumber purchased for the intended end-use and implications of having to replace unstable lumber once installed in a house under construction have created serious competitive (and long-term) disadvantages for coastal B.C. green and even solid kiln-dried Douglas fir, hemlock/balsam and spruce structural products.
  - Recent surveys indicate that more than 60% of post-and-beam houses built before 1981 are in danger of collapsing in the event of a serious earthquake. This rapid aging of the existing home inventory will sustain expenditures on new homes as well as for renovated homes.
  - Many of the changes to traditional building methods and materials in the construction of new houses are the result of a number of well publicized government building regulation revisions during the last five years aimed at improving house durability and strength. These building regulation changes include amendments to the Building Standards Law, the introduction of the new Housing Quality Assurance Law and the mandatory 10-year home warranty program, new regulations against "sick-house" syndrome, and changes to fire code regulations for fireproof wooden structures.

- Japan's aging population will stimulate demand for "healthy housing" and renovations to existing housing (mainly apartments) to accommodate the lifestyle needs of elderly tenants. The number of Japanese households consisting only of persons over 65 years of ages was 6.2 million in 2002, in comparison with 1.1 million in 1975. By 2010, about 20% of all Japanese citizens will be over the age of 65.
- Japan has been actively promoting "light-gauge steel" frame construction which also incorporates plywood and some lumber in its construction.
- Continued growth of the repair/remodeling and home renovation segment is expected to occur as newer, higher-quality/more durable homes are expected to allow a significantly longer lifespan for houses that are better-maintained. Repair/remodeling and renovation is becoming an acceptable and less expensive option than building anew. Projections for steady growth of the DIY market segment are expected to create new channels for direct product movement from the importer to the large DIY chain stores. The growth of this segment (as in North America) is expected to increase sales of building materials for repair and renovations to maintain durability and provide greater comfort through the addition of new amenities and expanded living space.
- Increasing demand for stable and machine stress rated structural lumber products is also a result of the rapid growth of the computer automated "precutting" industry. Precutting plants require lumber components of exact dimensions and stability to accommodate their automated house cutting systems. Current estimates indicate that about 80% of all structural frames for new post and beam Japanese homes are produced in precutting plants.

3.2.6 B.C. Market Opportunities and/or Initiatives for Further Growth

- Japan's wood products building materials industry continues to undergo profound change as a result of several key factors:
  - stable to decreasing new housing starts;
  - revisions to home-building standards and regulations;
  - growing builder/consumer demand for performance-based,
  - laminated structural wood products;
  - changing home designs due to an aging population;
  - growing demand for "healthy housing" building designs and materials and
  - opportunities to source new, low-cost, softwood log and wood products supplying regions.
- An on-going understanding is required on the competitiveness of domestically produced products in Japan and from offshore suppliers (Europe, Southern Hemisphere; China, Other Asia) to better position B.C. wood products and opportunities.
- Ongoing assessment is required on the market for engineered products as well as specialty products and the fit for B.C., i.e., products and market segments beyond structural lumber.

- The new housing warranty required by builders continues to shift the market to engineered wood products and other performance-based products.
- Branding continues to be an opportunity for Canada Wood and B.C. products.
- B.C. could benefit by repositioning some of its existing products in Japan to grow the market by taking advantage of Japan's new housing warranty and the overall demand for engineered or pre-cut materials. The Japanese market has become less accepting of green and low-quality products (i.e., an issue for hemlock but has been countered with the E-120 program) while favoring new higher-quality and engineered solid wood products.
- Lumber continues to the main export product to Japan and marketing research or programs offer ways to hold or grow market share.
- Plywood is the other large volume export product to Japan and its competitiveness or niche applications require ongoing assessment to maintain its position.

The main sources of information used for the Japanese market analysis include: Statistics Canada; WOOD Markets Monthly newsletter; USDA-FAS; WWPA; Japan Lumber Journal, Japan Lumber Report and other publications. Specific FII market research reports include:

- Japan Marketing Research for Promotion of Canadian Lumber Use in Non-Residential Buildings - COFI - 2004 January.
- Japan Toward the Expansion of Japan's Canadian Softwood Plywood Market-Exploring Opportunities in the Institutional Building Sector for Inhabitant-Friendly – CANPLY - 2004 March.

3.3 China

3.3.1 B.C. & Canada Market Share

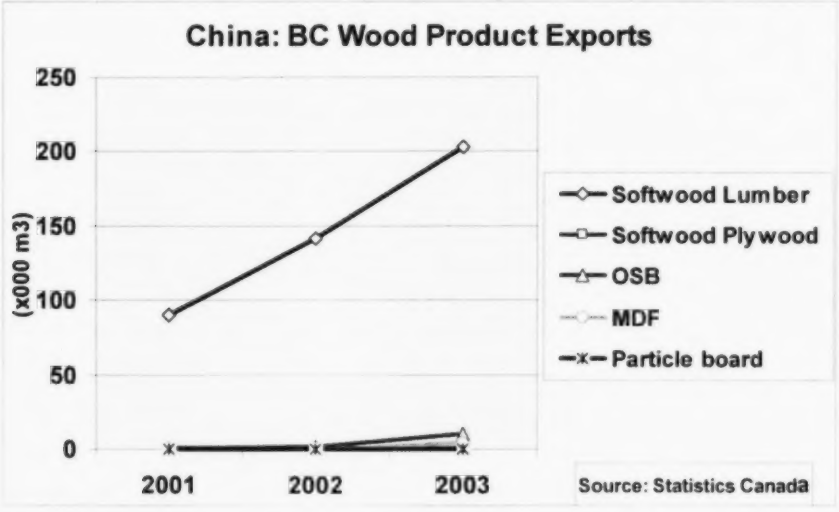
- China is a relatively small market for B.C. but the demand for imports is growing very rapidly – a trend that is expected to continue. B.C. softwood lumber exports are the only major volume item sold to China and it increased by almost 50% in 2003 as compared to 2002.
- Aside from large pulp exports, softwood logs are the only other major B.C. wood volume export product, although OSB imports are reaching the 10,000 m3 mark.

Summary of BC Exports by Major Market - 2003

Country:	CHINA							
	Units	Softwood Lumber	All Plywood	OSB	MDF	Particle-board	Other	Total
Total Consumption	(x000 m3)	7,145	19,768	11	12,615	6,487		46,026
Domestic Prod'n	(x000 m3)	6,157	21,024	0.0	11,283	5,474		43,938
Total Exports	(x000 m3)	122	2,041	0.0	63	41		2,267
Total Imports	(x000 m3)	1,110	785	11	1,395	1,054		4,355
Imports from Canada	(x000 m3)	203	0.6	9.9	4.4	0.0		218
Imports from BC	(x000 m3)	203	0.6	9.9	4.4	0.0		218
BC Import Market Share	(%)	18%	0.1%	87%	0.3%	0.0%		5.0%
BC Consumption Share	(%)	3%	0.0%	87%	0.0%	0.0%		0.5%
Imports from Canada	(Million $)	46	0.2	2.5	1.2	0.0	N/A	52
Imports from BC	(Million $)	46	0.2	2.5	1.2	0.0	2.3	52

* Other - Limited to Doors, Windows, Moulding, Millwork, Hardwood Flooring & Furniture
Source: Statistics Canada, COFI, WOOD Markets

- B.C. exports to China are summarized graphically below for the period 2001 to 2003.



3.3.2 Economic & Business Trends

- China's GDP has been averaging a sizzling 7 to 8% per year for much of the last six years and is creating growth opportunities for exporters to China. Economic growth is being cooled by the government in late 2004 but GDP in 2005 is still forecast be close to 8%.
- China's housing starts and the need to create as many as 5,000 satellite cities will drive the demand for housing solutions (including 2x4 wooden houses developments). However, wooden housing starts remain low pending further consumer and builder marketing and acceptance.
- China's average family has experienced a rapid rise in their income. Their primary area of investment is in their residence and, as a result, there has been a housing boom particularly in key eastern cities including Shanghai and Beijing. In urban Shanghai, the area of residential buildings constructed annually is close to, or exceeds, 20 million m2. This rate of construction is expected to last until 2010. The residential buildings are high-rise buildings, medium-high-rise buildings, low-rise apartment blocks, townhouses and single-family houses commonly known as villas. The potential market for wood roof trusses and systems is believed to reside in the following sectors:
    - Villas
    - Low-rise apartment blocks (roof replacement program or new construction)
    - Rural housing
    - Building restoration program (primarily temples and traditional wood housing)
- China continues to be one of the biggest timber consuming countries in the world. In the next five years, China's timber consumption is forecast to continue to increase rapidly because of the factors including the strong economic growth, 2008 Olympic Games, 2010 World Expo and improving health standards.

3.3.3 Domestic and Imported Wood Products Trends/Issues

- Total annual consumption of wood in China for all purposes is about 370 million cubic meters. According to official data, about 65 percent of the wood is used for industrial purposes. The construction sector, furniture sector and paper sector account for about 90 percent of total industrial wood consumption.
- In 2003, timber production is estimated at 47.59 million cubic meters, an increase of 7 percent over 2002. Although 7 percent is not a big number, it is still a turning point because timber production in China had been declining from 1998-2002, with the implementation of the Natural Forest Protection Program (NFPP) in 1998.
- Sawn-wood production in 2003 was 11.27 million cubic meters, an increase of 32 percent from 2002. The tropical sawn-wood production was 726,000 cubic meters, accounting for 6% of the total sawn-wood production.

- The domestic plywood sector and furniture sector develop very fast, while more and more products are exported, which determines the larger demand for timber material.
- The wood panel production in 2003 was 45.53 million cubic meters, which increased by 55 percent from 2002. The production of plywood, fiberboard and particleboard composed of 21.02 million cubic meters, 11.28 million cubic meters and 5.47 million cubic meters respectively, all increased by 85 percent, 48 percent and 18 percent respectively from 2002.
- China now represents over 25% of the world's MDF capacity.
- China's plywood production exceeded U.S. production to become the largest plywood producing country in the world. The fast development of China's plywood industry coincides with the fast development of China's fast-growing forest, especially the poplar base, which provides adequate raw material to meet the expanding international market.
- In 2003, total imported timber products reached 40.2 million cubic meters in roundwood equivalent volume (including wood chips), an increase of 5.5% over 2002 imports.
- The value of timber imports in 2003 was US$4.4 billion, about 13% above 2002 import value. Roundwood imports in 2003 reached 25.45 million cubic meters, a 4.6% increase over 2002, with a value of US$2.45 billion, a 14.5% increase over 2002. Compared to the 44% year on year increase in 2002, roundwood import growth for 2003 was considerably slower. The main reason was attributed to changes in imports from Russia. But in 2003, the roundwood from Russia slightly dropped from 14.81 million cubic meters to 14.37 cubic meters. Despite the slight decrease of imported roundwood, Russia continues to dominate China's roundwood imports. However, Russia's market share of China's roundwood imports decreased to 56% from 61% in 2002.
- Prices of imported timber products have increased rapidly since the second half of 2003, especially the timber products from North America. The main reason is increased freight rates.
- Imports of roundwood and lumber slowed down in 2003. Russia continues to dominate China's imports of roundwood, but its market share decreased to 56% in 2003 from 61% in 2002.
- Softwood log imports in 2003 were 14.97 million cubic meters, a 5.11 percent decrease from 2002 levels. The decrease in Russia Pine log imports was the main factor. In 2003, imported hardwood was 10.48 million cubic meters a 22.55 percent over 2002. This increase reflects changes in domestic market demand, including increasing demand for plywood raw material, like Okoume from Africa and Meranti from South-east Asia and the increasing demand for the decoration, flooring and furniture material, like Merban, Kempas, Beech and Teak.
- New Zealand has played increasingly important role in China's imported roundwood market. China's roundwood imports from New Zealand are of two species: Douglas fir and radiata pine, which can be used as raw material for plywood. The rapid development of China's plywood industry increased the demand especially for New Zealand Radiata Pine.
- Imports of softwood lumber decreased By contrast, hardwood lumber imports increased because of changing domestic demand.

- Imported softwood lumber in 2003 was 1.37 million cubic meters, a 16% improvement over 2002. Softwood lumber imported from Russia decreased 4.6% to 436,000 cubic meters in 2003, but still accounted for 32% of the total imported softwood lumber. Chinese import data shows that softwood lumber imported from Canada increased from 127,000 cubic meters in 2002 to 265,000 cubic meters (7% market share and sixth largest supplier) in 2003 - a 109% increase. (Note: Statistics Canada data indicates that lumber exports increased from 142,000 m3 in 2002 to 203,000 m3 in 2003). Softwood lumber imported from U.S. also increased 63% to 55,000 cubic meters (1% market share).
- Since the end of 2003, imported timber and products prices have increased rapidly, especially logs, sawn lumber, wood-based panel (including plywood, fiberboard and particleboard) and wood flooring. However, the prices for domestic lumber and wood products have shown little increase and with some products prices are even decreasing. The price of imported logs and sawn lumber increased RMB 50-120/m3 (~Cdn$10 to 20/m3), especially for tropical hardwoods and the North America wood. Maple imported from U.S. and Canada increased from RMB 10,000 (~Cdn$2,000/m3 in 2003 to RMB 11,500 (~Cdn$2,200/m3) this year.
- By 2010, China's furniture production is forecast to exceed Italy and become the world's largest furniture production and export country in the world. Even with the impact of China's sluggish economy and U.S.'s anti-dumping case on bedroom furniture, the furniture production in China in 2004 is forecast to increase 20 percent above 2003 levels because of strong domestic demand. In the following five to ten years, millions of young people born in 1980's China's last baby boom period, will come into their marriage years. These new families will lead an ever increasing trend in furniture consumption.

3.3.4 Major Import Suppliers/Competitors to the Market.

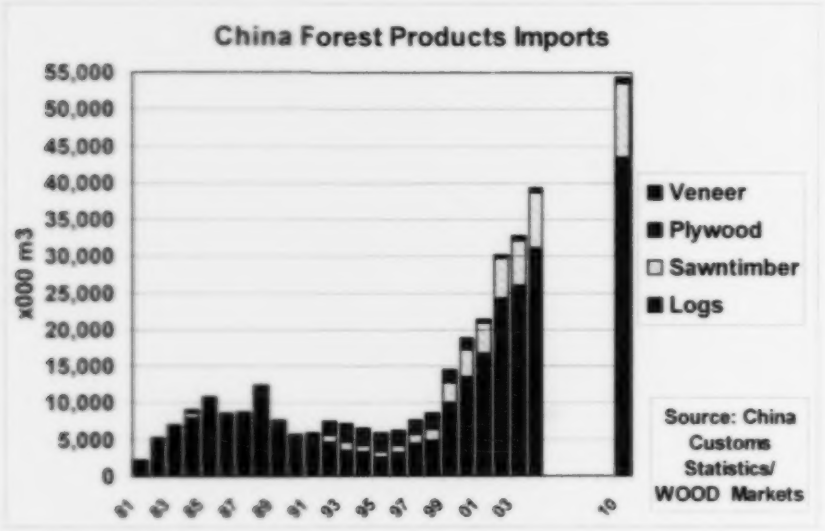
- Major Competitors to Canada by Major Product in 2003::
  - Softwood logs: Five countries accounted for 85 percent of China's imported roundwood market in 2003:
    - Russia (56%)
    - New Zealand (8%)
    - Malaysia (12%)
    - Papua New Guinea (5%)
    - Gabon (4%).
  - Softwood Lumber: Chinese mills process a large volume of imported logs to produce lumber. Imported lumber in 2003 increased slightly and reached 5.51 million cubic meters, valued at US $1.19 billion, a slight increase of 2.0% and 3.0%, respectively, over 2002. Six countries accounted for almost 70% of China's imported softwood and hardwood lumber market in 2003:
    - Indonesia (20%)
    - the U.S. (12%)
    - Thailand (12%)

  - Russia (10%)
  - Malaysia (8%) and
  - Canada (7%)
- Plywood/OSB: Plywood imports have been declining as Chinese investment in new plywood facilities has developed to process both hardwood and softwood logs. B.C. had minimal exports of panel products and had tiny import market shares in these products. Russian and New Zealand logs are the major softwood log suppliers for softwood plywood.
- Particleboard/MDF: Increasing Chinese capacity has limited imports to small volumes, mainly from Asia. China is now the largest single country producer of MDF in the world with 25% of global capacity.
- Specialty/Value-Added: Domestic production (furniture, doors, etc.) plus increasing volumes of imports in specialty products from many sources.

- Russia remains a formidable raw material supplier to China with its untapped forests that lie adjacent to China's border. It is difficult for other countries to compete with Russia at present because of Russia's competitive pricing and its tree species similarity to China.
- Russia was and continues to be the biggest timber supplier to China because of its competitive prices, especially when ocean freight rates are high (Russia transports mainly by rail and truck), and the similarity of Russian and Chinese tree species. China's preferential forest products border trade policy allows Chinese companies locating along the Sino-Russian border import logs and sawn wood to pay only half the value-added tax (VAT) – 6.5% on logs and 8.5% on sawn wood. The preferential policy also strengthens the competitive capability of Russia's forest products in China's market.

3.3.5 Factors Impacting Import Growth for Wood Products

- China's severe timber harvest reductions starting in 1998/99 have created a huge market opportunity for imported logs and wood products.



- China is expected to reduce its residential house construction using brick and move to more concrete and potentially to even greater numbers of wood housing systems.
- China's move to allow private ownership of residential housing is expected to create strong demand for interior finishings of concrete condominiums and apartments.
- China's expanding middle class is expected to increase its demand for imported wood products. This strong demand for timber products will continue in the coming years, driven by the rapidly developing construction, furniture and panel sector. The gap between domestic supply and demand will grow and imported timber products will be required to meet the gap.
- Although government authorities have acted to prevent overheating of the economy, many experts forecast that wood consumption in China will continue to increase in 2005. The reasons include:
    - Rapid urbanization stimulates the housing and decoration sector.
    - In countryside, a new house-building period is coming as the peasants' income increases.
    - The Olympic projects, especially "Green Olympics", will need a great amount of wood.
- China's housing building codes have been developed to include Canadian wood species in structural applications which is a big hurdle to overcome for future growth.
- Historically, China has not had the provision for wood-frame construction in their building codes and has also had very restrictive requirements under their fire

protection and seismic design codes. However, these barriers for wood are slowly being eliminated through code revisions in China, including Canada's participation through a 1999 Canada Mortgage and Housing Corporation / Ministry of Construction initiative to form a Canada-China subcommittee on building codes & standards. The results of these efforts have been significant.

- Fire code challenges have been standing in the way of expanded use of wood in construction in China. The harmonization of the two main fire codes in China is required to support the relaxing of tougher GBJ-16 regulations. The objective is to develop strategic and credible ties with the research communities.
- New regulations on wood packing materials in reference to the provisions of International standards for Plant Quarantine Measure No. 15 on Norms for the Administration of Wood Packing in International Trade are being implemented in China. Regarding the date of implementation for the wood packaging measure, China said that some time would be given before the implementation of the new regulations, but was not specific on the timing.

3.3.6 B.C. Market Opportunities and/or Initiatives for Further Growth

- While China is a tiny market as compared to the U.S. market, it represents the fastest growing market for B.C. wood products exporters.
- A close presence and ongoing monitoring and to influence Chinese building codes and standards, as well as phyto-sanitary sta- 'ards, is required to ensure that B.C./Canadian wood products are not excluded from certain end use applications.
- In softwood lumber, China is now B.C.'s 4th largest market (after the U.S., Japan and Taiwan) and further gains are possible. However, most of the lumber exported from B.C. will either be remanufactured or used for low valued applications. This may limit B.C.'s lumber exports unless a strategy to resell the Chinese-processed and finished products back into other B.C. markets that already use B.C. species in finished product applications.
- Structural lumber for building 2x4 platform homes may not be the major growth market from B.C. as was initially expected. Instead, it more likely that lumber used in Chinese processing plants (lower grade as well as higher grade shop-type lumber) will continue to be the growth business until wooden housing becomes better established.
- Opportunities for specialty and value-added products may be more difficult in the future as China's finished products industry continues with its rapid expansion. The opportunity for niche applications will be less subject to competitive pressures from Chinese producers until the volume potential increases.
- Canadian research conducted by Canada Wood and/or FII have shown some positive results around the potential of wood framed houses. Aside from the Dream Home model home and demonstration project, the following attributes have been determined by FII-sponsored research:
    - It appears that the aesthetics of wood-framed homes was the number one positive attribute in a survey of three major and affluent cities in China.

  - This feature was followed by its wood's insulative properties and environmental protection.
  - Attributes such as "natural" and comfortable were also common among the respondents surveyed.
  - The actual performance of wood structures was NOT listed as a positive except for its earthquake resistance.
  - On the negative attributes side, Chinese respondents' concerns over fire ranked number one in all three cities that have been surveyed.
  - The other negative attributes noted were virtually all performance related, including lack of insect resistance, moisture resistance, or even seismic concerns (although conflicting with the positive attribute mention above).
  - Dealing with the concerns over these negative attributes will be the key in any promotion activity in China.
- The results of the above study suggest that there could be strong potential demand for B.C./Canadian wood products/systems. In addition to continuing exposure through the existing promotion of high-end single-family homes, it is recommended that the greatest potential lie in the recognition of the cultural, social, political and economic realities that exist for housing in China. These largely point toward increased wood-use in their common low-rise multifamily structures. This must include dealing with the existing negative performance connotations of wood by the Chinese. Promotional efforts by the Canadian government and industry need to incorporate the knowledge gained by this type of market intelligence and in ongoing market research studies.
- Other completed FII-sponsored research involving a cost analysis of comparing wood to steel and other roof systems clearly favored wood. The recommendation from this second study indicates that a well-organized market development effort by Canadian exporters of solid wood products, machinery, equipment and technology is warranted. The key ingredients of such a program should address the some of the following issues:
  - Transfer of technology.
  - Development of appropriate codes.
  - Demonstration projects.
  - Involvement in a large-scale commercial project.
- China remains a very competitive producer of commodity panel products itself due to low wages (US $0.50 per hour). This is expected to limit further exports of B.C. softwood plywood, particleboard and MDF. Since there are only some smaller and older OSB-type mills in China, OSB from B.C. could be an export opportunity for certain market applications (including non-housing applications).
- Improvements on branding the 'Canada Wood' name continue following some early confusion as many associations and provinces started their own initiatives.

The main sources of information used for the Chinese market analysis include: Statistics Canada; WOOD Markets Monthly newsletter; USDA-FAS; WWPA; Japan Lumber Journal, Japan Lumber Report and other publications. Specific FII market research reports include:

- China Benchmark Study for Structural Wood Products in China - FII - 2003 April

- China Prelim Competitor Analysis for Wood Products in China - FII - 2003 August
- China Opportunities for the Use of Solid Wood Products in Traditional Structures and Applications - COFI / Cartwright - 2004 March
- China Opportunities for Wood Roof Systems China - COFI / Cartwright - 2004 March
- China Benchmarking Chinese Building Specifiers - BC Wood - 2004 March
- China Opportunities for Treated Wood in China - BC Wood - 2004 March
- China Market Study for Canadian Style Log and Timber-Framed Structure - BC Wood - 2004 April
- China Opportunities for Lumber in China's Interior Finish and Furniture Industries - FII - 2004 April
- China Benchmarking Wood Use in Roofs of Multi-Family Housing in China - FII - 2004 May

3.4 Taiwan

3.4.1 B.C. & Canada Market Share

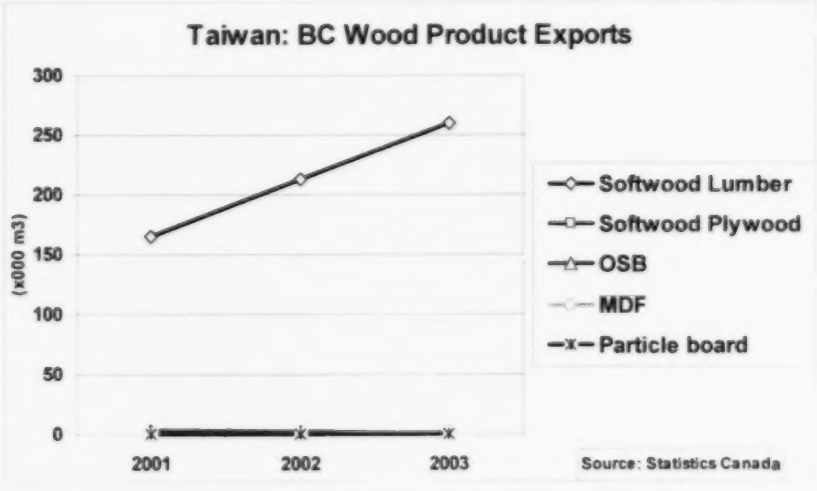
- Taiwan represents a moderate size market for Asia but only B.C. structural lumber has made any inroads into Taiwan – it has a very respectable 45% share of softwood lumber imports as well as consumption.
- Other wood products have minor export volumes to Taiwan.

Summary of BC Exports by Major Market - 2003

Country:	TAIWAN							
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other	Total
Total Consumption	(x000 m3)	565	128	2.4	267	270		1,232
Domestic Prod'n	(x000 m3)	10	10	0.0	0.0	0.0		20
Total Exports	(x000 m3)	22	1.6	0.0	14	4.2		42
Total Imports	(x000 m3)	577	119	2.4	281	274		1,254
Imports from Canada	(x000 m3)	260	0.5	2.3	2.7	0.0		265
Imports from BC	(x000 m3)	260	0.0	0.7	2.0	0.0		263
BC Import Market Share	(%)	45%	0.0%	30%	0.7%	0.0%		21%
BC Consumption Share	(%)	46%	0.0%	30%	0.7%	0.0%		21%
Imports from Canada	(Million $)	55	0.3	0.6	0.9	0.0	N/A	58
Imports from BC	(Million $)	55	0.0	0.2	0.6	0.0	1.0	57

* Other - Limited to Doors, Windows, Moulding, Millwork, Hardwood Flooring & Furniture
Source: Statistics Canada, COFI, WOOD Markets

- B.C. exports to Taiwan are summarized graphically below for the period 2001 to 2003.



3.4.2 Economic & Business Trends

- With the rapid change in domestic costs of labor, land and other economic fundamentals, production cost and overall competitiveness was eroded. The recent 2004 recession in the local construction industry has also affected the demand for wood products. Taiwanese wood-based manufacturers have, thus, been forced to invest in lower cost South-East Asian countries, China and other regions in order to remain competitive. Consequently, the Taiwan government actively provides assistance to wood suppliers in the industrial integration, and investment in overseas wood industry, and the development of value-added wood products.
- Taiwan's GDP growth has been one of the strongest in Asia in the last ten years. Average income, and therefore purchasing power, is much higher in Taiwan versus China at USD $15,000 per capita – the second highest in Asia after Japan. Workers in the manufacturing industry earned an average of about US$12,500 in 2003. However, GDP growth was negative 2.2% in 2001 and 3.6% in 2002 and 3.3% in 2003 which is considered to be recession-like given the strong growth experienced in the 1990s. Stronger GDP was forecast for 2004 (4.5%) and in 2005 (5.4%).
- Housing starts have been steadily declining since 1993 (224,000) to a low in 2003 of 34,000. For 2004 and 2005, housing is expected to hold at the reduced levels of about 35,000 units.
- Wooden housing starts remain an insignificant part of Taiwan's housing market but are very poplar as country homes. Wood frame home starts were roughly estimated at 875 in 2003 and should exceed 1,000 in 2004.
- In particular, the value of timber imports has fallen due to a falling proportion of import value from hardwood lumber and plywood, and hardwood logs and veneer.

3.4.3 Domestic and Imported Wood Products Trends/Issues

- A general preference toward relocating wood processing operations offshore, coupled with continued anxieties about the domestic economy (which is highly dependent upon income from IT product exports), rule out any serious rise in broad-based demand for either finished or raw material wood products in the coming 2~3 year period. However, it seems clear that the depressed market for wood "bottomed out" and began recovering in 2000-2001. Key segments such as softwood lumber (used for packing material, cement construction braces, interior design framing, and wood frame structures), plywood, and temperate hardwood lumber (mostly used in furniture, flooring, and wood product manufacturing) have returned to a pattern of moderate year-to year growth in line with the improvement of the general economy.
- Wood imports across most subcategories are continuing to claw their way back from lows hit around 2000, with increases largely driven by a rebounding domestic economy, continued investment in the island's "recreational" infrastructure, and rising demand for home remodeling materials. While opportunities for sales growth

continue to be attractive in certain subcategories (engineered wood and softwood lumber in particular), Taiwan imports in 2002/2003 represent just half of the US$1.925 billion in wood that arrived in 1993.

- Taiwan's lumber imports were declined from 1.40 million m3 in 2002 to 1.12 million in 2003. From a ten year perspective, there has been a slow decline in lumber imports. However, over the last five years the rate of decline has slowed. In general, and in the face of the current bearish environment in Taiwan, lumber imports are fairly resilient. For 2004, estimates are for lumber imports to increase marginally to the 1.15 million m3 range.
- Canada leads as the softwood lumber exporter to Taiwan. The quantity of softwood lumber from Canada reached to 203,364 m^3 in 2002 and increased again in 2003 to 260,000 m3 .This was followed by New Zealand (72,000 m3), China (37,000 m3), the U.S. (26,000 m3) and Brazil (18,000 m3). There are a number of newer exporters who are increasing their softwood lumber exports to Taiwan.
- Of Taiwan timber imports from B.C., the value of softwood lumber represents almost 95% of the export value (excluding logs, chips and pulp and paper products).
- The bulk of Taiwan's wood imports continue to be low-value softwood dimension lumber and plywood destined for industrial uses and hardwood paneling and veneers used for decorative purposes. This is expected to remain true through at least the coming several years. Much of the softwoods imported into Taiwan continue to come in as plywood and dimension lumber. A significant percentage of dimension lumber is consumed by the construction industry to create the temporary supports and casts around which cement is poured to form building foundations, frames, and walls. Around 95 percent of new buildings, both residential and commercial are constructed of reinforced concrete (RC). Plywood sheets are used in many applications including interior decoration, as backing for billboards and signs, and as facing on temporary structures. This is a high volume and low unit-value segment.

3.4.4 Major Import Suppliers/Competitors to the Market

- Major Competitors to B.C./Canada by Major Product in 2003:
  - Softwood Lumber: Canada is the largest softwood supplier to the market:
    - Canada (46%)
    - New Zealand (13%),
    - China (7%),
    - the U.S. (5%) and
    - Brazil (3%).
  - Softwood Plywood/OSB: Small softwood plywood volumes (120,000 m3 in 2003), led by China (99,000 m3) and Malaysia (15,000 m3) .Hardwood is the major end use product led by suppliers with 540,000 m3 led by Indonesia, Malaysia and China. OSB imports are insignificant.
  - Particleboard/MDF: Virtually all consumption is imported – (Particleboard from Europe, China, Indonesia and Central/South America; MDF from Indonesia, Thailand, Australia and New Zealand).

- Specialty/Value-Added: Many suppliers.

3.4.5 Factors Impacting Import Growth for Wood Products

- With a large middle class that has an estimated average household income of US$33,000, and growing propensity to invest in personal leisure, Taiwanese have money to spend on comfort and leisure products. To the existing small but growing demand for 2x4 and timber frame construction from well-off individuals and resort/recreation area developers, Taiwan is set to open the doors for using structural wood in public, commercial, and multi-family developments.
- Taiwan, however, sees less than 1% of structures built with wood-frame construction. Common perceptions of wood-based structures are that they are: temporary structures; they catch fire easily; they do not last as long as other materials. These perceptions are major impediments to the adoption of wood-based construction materials.
- Previously, Taiwan building laws were very strict on wood-frame structures:
  - If the structure is to be lived in, the height should not be over two stories.
  - If the structure is not used for living in but for the public recreation, then it should not use wood as the main component of the interior frame.

  However, with 'Green Building' increasingly popular, the Construction and Planning Administration, under the Ministry of the Interior, liberalized the regulations on wood-frame structures. Currently, a wood-frame structure can have 4 stories but should not be higher than 14 meters and, the interior frame can be wood-based.
- Canadian imports remain very strong in softwood lumber and are in a significant way being influenced by two major themes in the Taiwan market: "recreational" and "green".
- Programs aimed at the Taiwan construction authorities to target international regulatory standards for wood frame construction and wood materials and for architects and builders promoting development of a wood frame housing market in Taiwan have been ongoing that should pay more dividends over time.
- In early 2003, Taiwan approved revisions to the building code that now permit wood to be used as main structural members in residential and commercial construction. These revisions generally conform to US construction standards and give Taiwan developers, for the first time, a regulatory framework within which to develop multiple-family and commercial properties using structural wood (2x4 and post-and-beam). These revisions represent a key step forward in encouraging middle- and upper-middle class home buyers to consider purchasing a wood frame home as their first or second home.
- The revised building code has a stated objective of classifying wood as a "normal" construction material -- on a par with steel and concrete. While long approved, in practice, for constructing single-family homes, structural wood was proscribed from use in multi-family or scale developments without special central government committee approval. This was due to fire code regulations which forbad the use of any "flammable" material as a load-bearing member. As of the new code's date of

announcement (1 May 2003) builders in Taiwan are permitted to proceed with construction of multiple home residential communities and townhouse developments provided that individual residential units are separated either by a suitably wide open space or a non-wood fire barrier (firewall). The as yet unresolved issue of calculating fire resistance for either 2x4 or timber frame structures continues to require that plans for public buildings (such as office / shopping structures, auditoriums, and other such enclosed structures) must be approved by the central government's construction committee prior to construction and use.

- Taiwan's generally improving economy is boosting overall construction and raising orders for wood frame homes, D-log cabins, glulam wide-span structures, and outdoor recreational and park facilities. Wood construction should continue to show positive growth, based on reports from Taiwan wood construction industry sources. Wood frame construction is expected to benefit in the near term from policy changes, some already implemented, that put structural wood on an equal footing with concrete and steel in the regulations.
- Due to intense competitive pressures for the construction and wood manufacturing industries, there will be an ongoing focus on improving distribution and logistics of wood materials. Improvements in shipping, handling and other logistics would provide a strong competitive niche into the Taiwan market. Canadian wood suppliers need to exploit their skills and knowledge in the above areas that could be applied to the Taiwan market and with key, select partners willing to adopt these more modern methods.
- Overall, Taiwan remains a subdued market both for wood imports from Canada and other softwood exporting countries, with some growth estimates only expected to average 4% over the coming 3-year period. This is due in large part to the shift of Taiwanese wood products manufacturing operations offshore and the return of the construction and remodeling sectors to moderate growth levels. Sub sectors within the solid wood products sector that continue to hold particularly good prospects include treated softwood and engineered wood products for home construction and public/recreational infrastructure enhancement. New construction codes recently approved and a fire code just completing it review will open the market to much more extensive development of opportunities for use of structural wood in residential developments, townhouses, small office buildings, schools, and so on. The overall consumption of wood products is falling and will likely see further declines due to the depressed construction industry and the overseas migration of furniture manufacturers. However, there appear to be specific areas where Canadian wood suppliers may be able to pursue opportunities.

3.4.6 B.C. Market Opportunities and/or Initiatives for Further Growth

- The consistent pressure to move towards "green" construction has positive implications for the demand of wood-based construction materials in Taiwan. In particular, the Green Building Certification will have a consistent, positive impact for wood-based materials. Marketing of wooden materials can thus be in alignment with

these needs (including the perception of being green due to highly visible areas such as wooden outdoor walkways, or interior finishing).

- The move towards recreational farming and the subsequent building of new structures presents an opportunity for wood-based products. Regulatory change is underway to simplify the application process by the farm-owner, and amidst these changes it may be worthwhile for Canadian wood exporters to monitor the changes and their implications.
- While the market for wood frame and timber frame homes in Taiwan remains in its infancy, changes in consumer attitudes and government policies offer good potential for growth in this sector over the coming years. However, the ferocious Formosan termite and Taiwan's humid climate underscore a need for pressure treated wood in nearly all outdoor / structural applications.
- Opportunities for softwood products have been limited to decorative uses on the high end and the bulk of the softwood lumber used is for industrial applications on the low end. However, these volumes add up to show that Taiwan is now the 3rd largest softwood lumber market for B.C. exporters.
- Taiwan is mainly a tropical hardwood lumber and plywood market with few applications for use in wooden housing. This essentially eliminates softwood plywood for most applications.
- The opportunities for products within existing building types (concrete and steel) as well in structural wood for single family housing are potential growth markets.
- A better understanding of the market for specialty products may provide a potential fit for B.C. for products and market segments beyond structural lumber. However, this will take time, market research and positioning.

The main sources of information used for the Taiwan market analysis include: Statistics Canada; WOOD Markets Monthly newsletter; USDA-FAS; and other publications. Specific FII market research reports include:

- Taiwan Marketing Research for Promotion of Canadian Lumber Use in Non-Residential Buildings - COFI / Cartwright - 2004 March

3.5 South Korea

3.5.1 B.C. & Canada Market Share

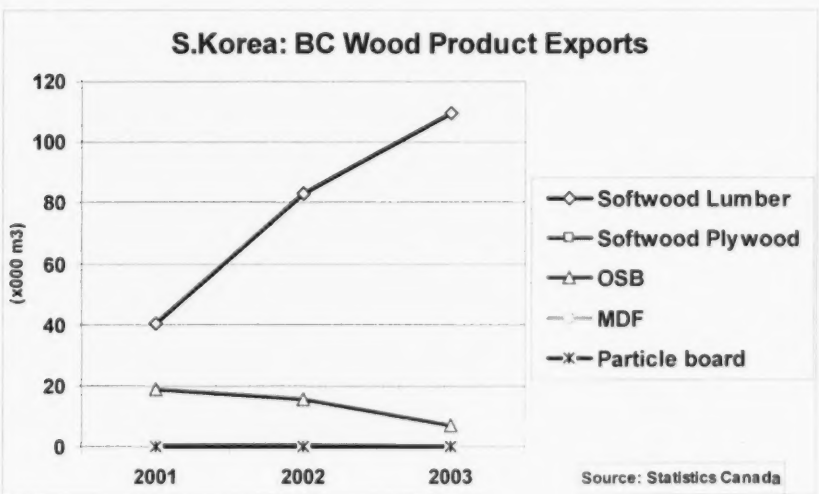
- South Korea is a relatively large market by Asian standards but relies heavily on log and chip imports for its processing industry. B.C. so far has been a smaller player in this market – softwood lumber represents the bulk of imported products. B.C.'s lumber imports doubled in 2002 and gained a further 25% in 2003.

Summary of BC Exports by Major Market - 2003

Country:	SOUTH KOREA							
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other	Total
Total Consumption	(x000 m3)	4,495	2,319	18	1,946	1,472		10,250
Domestic Prod'n	(x000 m3)	4,209	889	0.0	1,415	794		7,307
Total Exports	(x000 m3)	7	35	0.0	51	3		96
Total Imports	(x000 m3)	293	1,465	18	582	681		3,039
Imports from Canada	(x000 m3)	113	0.0	14	56	15		199
Imports from BC	(x000 m3)	109	0.0	7	0.1	0.0		116
BC Import Market Share	(%)	37%	0.0	38%	0.0	0.0		3.8%
BC Consumption Share	(%)	2%	0.0	38%	0.0	0.0		1.1%
Imports from Canada	(Million $)	22	0.1	3.1	0.1	0.0	N/A	30
Imports from BC	(Million $)	21	0.0	1.7	0.1	0.0	4.2	27

*** Other - Limited to Doors, Windows, Moulding, Millwork, Hardwood Flooring & Furniture**
Source: Statistics Canada, COFI, WOOD Markets

- B.C. exports to South Korea are summarized graphically below for the period 2001 to 2003.



3.5.2 Economic & Business Trends

- The Bank of Korea forecasts that the GDP growth rate will be 4.6% in 2004 compared to 3.1% in 2003. Even though international and domestic uncertainty dampened economic growth in 2004, the continued increase of export keeps the forecast of economic growth relatively remained unchanged. For 2005, GDP is forecast at 4.0%.
- In 2003, the housing starts recorded 586,000 units, a 12.1% decrease compared with previous year due to sharp decrease of multi family dwellings. The private sector recorded 465,000 units, a 14.4% decrease, whereas the public sector recorded 121,000 units, a 2.4% decrease compared with 2002. Among the housing starts in 2003, apartments occupied 80.2%, multi family dwellings occupied 14.2% and single family dwellings occupied 5.6%.
- Strong government intervention to curb the speculative housing market further discourages Korean economic recovery. In turn, building starts for the first six months in 2004 declined sharply by 52% compared to the same period in 2002.
- In the 1st half of 2004, the housing starts were recorded at just 154,000 units, a 52.1% decrease compared with the 1st half of 2003 (321,000 units) because of the depressed construction markets. The housing starts for 2004 are expected to be 520,000 units, an 11.3% decrease compare with 2003.
- In 2003, the timber (wood) housing starts were recorded at 2,200 units, a 37% increase over the 1,600 recorded in 2002.

3.5.3 Domestic and Imported Wood Products Trends/Issues

- In 2003, log imports recorded 7.23 million m^3, a 6.6% decrease compared with 2002. The import volume of hardwood logs decreased 3.9%, and softwood log imports also decreased 6.9%. In hardwood, the import from Solomon Islands increased 30%.
- In softwood logs, New Zealand pine imports decreased 5.6% and Australian pine logs recorded a 27% decrease compared with last year. The volume of imported softwood logs was 6.64 million m3 (vs. 7.13 million m3 in 2002) and represented 92% of total log imports. In species, the volume of Radiata pine recorded 4.38 million m^3 and occupied 61% of all log imports and occupied 66% of softwood log imports. Of softwood logs, New Zealand (4.0 million m3) was followed by Russia (1.45 million m3), Australia (521,000 m3) and the USA (451,000 m3).
- The import volume of sawn timber in 2003 was 750,000 m^3, a 10.5% decrease compared with previous year. The imports of hardwood decreased 17%, whereas the softwood increased 1.7%. The share of softwood imports was recorded at 39% at 293,000 m3, the highest level since 1988. Canada had the highest import softwood lumber volumes at 113,000 m3, followed by New Zealand (57,000 m3), Chile (52,000 m3), Russia (49,000 m3), Brazil (12,000 m3) and the U.S. (4,000 m3).

- In 2003, the import volume of plywood 1.465 million m³, a 1.7% increase compared with 2002. In 2003, Indonesia recorded a 7.1% decrease and China recorded 20% decrease, whereas Malaysia recorded 17% increase compared with last year.

3.5.4 Major Import Suppliers/Competitors to the Market

- Major Competitors to Canada by Major Product in 2002:
  - Softwood Logs: Korean import market share was led by the following countries (6.64 million m3 of total softwood imports):
    - New Zealand (60%)
    - Russia (22%),
    - Australia (8%) and
    - the USA (7%).

  - Softwood Lumber: Canada had the highest import market share for softwood lumber import volumes (293,000 m3 of total softwood imports):
    - Canada (38%)
    - N. Z. (19%)
    - Chile (18%)
    - Russia (17%)
    - Brazil (4%)
    - USA (1%)

  - Canadian OSB has a large market share (35%) of a very small import market.
  - Plywood: Mainly hardwood plywood imports from Indonesia, Malaysia and China – all three account for 94% of plywood imports.
  - MDF: MDF imports (582,000 m3) were led by Australia (19%), Indonesia (13%), Malaysia (11%), New Zealand (10%), Canada (10%) and Thailand (10%).
  - Particleboard: In particleboard imports (681,000 m3), Europe represented 38% of total imports in 2003 and (led by Belgium, Portugal, Spain, and Romania), while Thailand had the second largest single country import market share (18%) following Belgium (20%).
  - Specialty/Value-Added: B.C.'s competes against many Asian competitors.

3.5.5 Factors Impacting Import Growth for Wood Products

- Despite near-term weakness of demand in the first half of 2004, the import volume of wood products is expected to increase in tandem with expectations that the Korean economy will continue to expand over the next three to five years. One area expected to show particularly good growth is the repair and remodeling market for existing buildings. Regulations to curb the destruction of old apartment complexes will encourage repair and remodeling of old buildings instead of demolition and

reconstruction. The Korea Remodeling Association projects the 2004 remodeling market at US$11.4 billion (equivalent to Korean Won 13.3 trillion), up 7 percent from last year. The repair and remodeling market is expected to continue to grow at roughly 6-8 percent annually through 2010.

- The growing "country-style housing" market demand has coincided with the need to greatly expand South Korea's major cities. Given the newly emerging market demand for lower density housing, the planning of new satellite towns has become somewhat of a challenge for the authorities. They had to accommodate lower density multi- and single-family housing forms, as well as house as to house many people as possible.
- As South Korean manufacturers are fleeing rising labor costs and the strong Korean trade unions to relocate to China, the nation lacks new competitive industries that might absorb capital from uncompetitive ones. Putting capital into the housing sector could be the best solution, but appropriate policies are needed to ensure that the transition does not lead to speculative excesses.
- In South Korea, the government has recently announced its intention to make positive changes to the fire code and significant regulatory changes are expected to be enacted in January 2005. These code revisions will permit use of WFC in multi-family, multi-storey structures. An important element is the increase in height for wood buildings from 13m to 18m at the roof peak. This means four storey wooden structures will be permitted. A number of important issues remain to be clarified including the government requirement to certify or license builders to use the new fire rated assemblies to build multi-family structures. Also policies relating to hybrid construction, where wood is combined with concrete, offer additional opportunities and these will be assessed further.

3.5.6 B.C. Market Opportunities and/or Initiatives for Further Growth

- Forecasts call for 5 million housing units over the next 15 years in South Korea with an increasing number of wooden or partly wooden units. This, coupled with an expanding renovations market, could conceivably equal the amount of wood consumed in Canada's domestic housing industry annually. Given the newly emerging market demand for lower density housing, the planning of new satellite towns could be a huge stimulus for softwood product imports. However, with a dominate percentage of concrete housing, end use applications may be limited to interior finishings until more wooden housing units take off.
- Fire code restrictions for wood could limit solid wood product applications in South Korea. Given the current market preferences, if the fire codes can be adapted to allow for wood to be used in urban and suburban medium-density, multi-family housing, then wood products have a good opportunity to capture virtually all of the single-family market, as well as to be in a good portion of the medium-density, multi-family market. There is also a huge new renovation market opening up for older high-rise apartments in the cities, which could also provide significant opportunities for light wood frame, wood components and wood finishing materials.

- In the non-residential construction industry, many young, leading-edge architects in Korea are already showing a marked preference for the beauty, strength and long spans of heavy timber and engineered wood structures, so this sector also presents significant opportunities for B.C. and Canadian producers.
- On of the highest priority code-related issues in South Korea is adapting to its fire code. If fire codes can be adapted and a pool of knowledgeable labor created, every sector of the B.C. and Canadian forest industry could become involved in the South Korean market — the high-grade mills on the Coast, the dimension lumber and panel product mills in the Interior, as well as the value-added producers.
- The key strategic issues that have been identified in Korea to monitor include the following:
  - Building Codes and Fire Regulations.
  - Labor Shortages and Costs.
  - Quality of Construction.
  - Tariffs, Duties and NTB's.
  - Identifying and Nurturing Champions and Forming Strategic Alliances.
- In the short term, however, hardwood lumber and plywood still dominates imports.

The main sources of information used for the South Korea market analysis include: Statistics Canada; WOOD Markets Monthly newsletter; USDA-FAS; and various Association publications. Specific FII market research reports include:

- South Korea South Korea Market Report: Outlook for BC Wood Products Exporters – COFI / R.E. Taylor - 2000 March
- South Korea Report on the Korean Market- Developing a Strategy – COFI / D.E. Mawhinney - 2001 June
- South Korea South Korean Code Development - Forintek - 2003 March
- South Korea Construction and Building Products Profile: South Korea - C. S. Lee - 2003 May
- South Korea FII STRATEGY: South Korea – FII / Marshall 2003 November
- South Korea Opportunities for the Use of Solid Wood Products in Traditional Structures and Applications - COFI - 2004 March
- South Korea 3-5 Year Canadian Wood Products Strategy Created Jointly by Associations/Agencies in Consultation with Industry for Increasing Market Access and Product Sales to the Republic of South Korea - Natural Resources Canada - 2004 July

3.6 India

3.6.1 B.C. & Canada Market Share

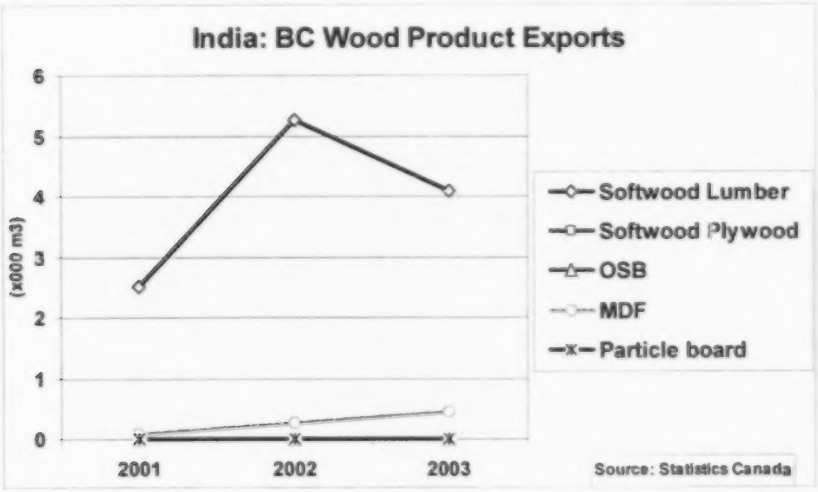
- B.C.'s import market share only registers in softwood lumber and some value-added products – both are under a 1% of India's consumption.

Summary of BC Exports by Major Market - 2003

Country:	INDIA							
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other	Total
Total Consumption	(x000 m3)	1,117	331	0	57	151		1,656
Domestic Prod'n	(x000 m3)	1,100	315	0	46	143		1,604
Total Exports	(x000 m3)	0.2	7.8	0.0	0.0	0.4		8
Total Imports	(x000 m3)	17	24	0	11	8		60
Imports from Canada	(x000 m3)	5.3	0.0	0.0	0.4	0.0		5.7
Imports from BC	(x000 m3)	4.1	0.0	0.0	0.4	0.0		4.5
BC Import Market Share	(%)	24.0%	0.0%	0.0%	4.0%	0.0%		7.5%
BC Consumption Share	(%)	0.4%	0.0%	0.0%	0.8%	0.0%		0.3%
Imports from Canada	(Million $)	1.8	0.0	0.0	0.3	0.0	N/A	2.2
Imports from BC	(Million $)	0.5	0.0	0.0	0.3	0.0	0.1	0.9

* Other - Limited to Doors, Windows, Moulding, Millwork, Hardwood Flooring & Furniture
Source: Statistics Canada, COFI, WOOD Markets

- B.C. exports to India are summarized graphically below for the period 2001 to 2003.



3.6.2 Economic & Business Trends

- The Indian economy has grown rapidly with an average annual GDP of 5% to 6% over the last ten years.
- Major economic reforms during the past ten years supports forecast economic growth of 6% to 10% per year for the next five to ten years - a similar trend to China.
- Average per capita income is still very low at approximately $400 (US) per year. The average number of housing starts in India is in the 2.0 to 2.5 million units per year with wooden housing representing a tiny share of the market – again, quite similar to China.
- Wood products used in India's construction industry account for approximately $4.22 billion, of which imports represent merely $384 million. With the preferred and prevalent method of construction throughout India being bricks and mortar, this will remain the case for the foreseeable future.

3.6.3 Domestic and Imported Wood Products Trends/Issues

- India's forest industry can be characterized as fragmented. In 1994, a census counted more than 24,000 manufacturers of wood products throughout the country consuming some 40 million cubic metres of industrial roundwood on an annual basis. With domestic production currently at about 30 million cubic metres and the demand for industrial roundwood anticipated to rise to approximately 58 million cubic metres by 2010 (Ace Global Private Limited 2000), the future potential opportunities for offshore exporters of lumber and value-added products could be large.

Forests:

- Indian forest resources have been seriously mismanaged and the rate of depletion of existing forests has necessitated major restrictions on the harvesting of timber. India has an annual requirement for timber of about 40 million m3 per year but present availability from domestic resources is closer to 30 million. This deficit has encouraged the government to allow low duty imports of logs and cants to maintain domestic lumber and plywood manufacturing capacity.

Logs:

- At present, approximately 90% of India's forest products imports arrive in the country in the form of logs. This high proportion is simply a reflection of the lower tariffs on log imports, as well as a plentiful and economical labor force available to the wood processing industry. From 12.5 million cubic metres in 2000, India's log demand is expected to rise to 20.5 million cubic metres by 2010. The majority of these imported logs (80%) are hardwoods, predominantly teak. The Indian people are firm believers in the use of hardwood, due to its proven strong resistance against a harsh climate, termites and boring insects. In fact, softwood is regarded as inferior to

hardwood. Some inroads have been made in recent years by New Zealand radiata pine, however, which has established a reasonable market as a lower-quality wood species. (Note: radiata pine logs are among the cheapest imported by India, i.e., US$65–$75 per cubic metre, on a cost-insurance freight (CIF) India basis.)

- Approximately 25 million m3 per year of timber that is used for industrial purposes (including chips) and a further 13-14 million m3 per year are used in solid wood product manufacturing.
- Log imports make up about 90% of India's wood imports.

Sawn Timber:

- In terms of overall costs, softwood and hardwood lumber comprises 6% for urban housing, 8% for rural dwellings and 4%–8% for non-residential construction. With Indian consumers using around 27 million cubic metres of sawn timber each year, these needs will continue to grow. Currently, only about 5% of sawn timber is actually imported in the form of dimensional lumber (DFAIT), and the rest enters the country as logs. Reportedly, high-grade hardwood lumber intended for the furniture industry dominates shipments.
- The main use for softwood and lower grades of wood products in India is for packaging, crating, pallets, construction frame-work, dunnage, etc. Low-grade hardwood and softwoods are traditionally used for these applications due to the short life of the end products or the temporary nature of the end-use. This type of lumber is normally cheap and of low quality.
- Wood products that are consumed in residential housing are mainly in finishing applications, such as in doors, windows, mouldings and wall panels.

Plywood:

- The Indian panel board industry is concentrated around the production of plywood. In 2001–02, for example, plywood accounted for a full 70% of all the panelboards produced in India. Over the past few years, plywood demand has risen more than threefold, as plywood and other block boards (ranging from 6–50 mm in thickness) have found consumer acceptance as core material in such applications as furniture panels, flush doors, veneer wall panels, false ceilings, wardrobes, shutters and partitions. They have also found application as desk surfaces, drawer fronts, chest sides and top shelves, cabinets, counters, bookracks and display fixtures. According to the market research of DFAIT, a wide range of timbers find use in the plywood industry, and more than 85 species — none of them coniferous — are recognized by the Bureau of Indian Standards (BIS) for use in the country. Currently, softwoods are being used only as fillers (inner cores) in plywood boards. Therefore, despite recent and future growth opportunities in this sector, until technical regulations are modified there is limited potential for B.C. softwood to be adopted by Indian plywood producers.

Non-Structural Panels:

- Other wood-based (or composite) panels are also manufactured in India, but on a much smaller scale than plywood. They include particleboard and oriented strandboard (OSB), fiberboard and medium-density fiberboard (MDF). The

production of MDF and particleboard has increased significantly since 1996. According to NZIER and DFAIT research, the Indian panels industry is anticipated to expand at the rate of 8% per year, with the MDF segment enjoying growth of 10%–15%. MDF is currently being used in retail housing, large building projects, packaging and the furniture industry. More recently, MDF has also found a niche application in kitchen cabinetry.

Value-Added Wood Products:

- Imports currently account for some 10% of value-added wood products in India, due largely to the country's exorbitant tariffs on imported finished goods. Most value-added products manufactured in India use imported raw materials/logs, on which there is only a minimal import duty. The majority are produced on site or in small, local millwork shops.

3.6.4 Major Import Suppliers/Competitors to the Market

- Most softwood suppliers to India are in the form of low cost logs (radiata pine logs from New Zealand and Australia).
- The bulk of the market consumption and imports is in hardwood products, led by teak that mainly comes from unsustainable sources in Myanmar, Indonesia and Malaysia.
- Both softwood and temperate hardwood products as well as MDF are imported from Europe.
- Other tropical hardwoods are imported from Africa.
- Imported lumber represents about 5% of India'sn eedsw hile value-added products represent only 10% of India's consumption.

3.6.5 Factors Impacting Import Growth for Wood Products

- The Indian wood trade has a strong traditional preference for hardwoods. Softwoods are perceived to be inferior and low-priced. This preference is related to hardwoods' superior termite resistance.
- In residential construction, wood is used primarily for doors, window frames, wall panels, moldings, interior finishes and furniture. Lack of domestic timber and continued expansion of the country's construction industry is likely to necessitate increased imports of logs, and in selected areas for finished and semi-finished wood-based building products.
- Tariffs are perhaps the biggest issue for exporters to India. Since 1995, manufactured wood products that had been previously prohibited are now allowed entry on payment of significant tariffs (between 25% and 70%). Sawn lumber imports are currently subject to a tariff of 30%, and finished wood products a remarkable 56.8%. This contrasts with tariffs on log imports of only 9.2%. Combined with low labor costs and the large number of small sawmills in India cutting wood to size for the local market,

these tariff barriers help to explain why 90% of the wood entering India arrives in log form.

- On May 31, 2004, the Department of Agriculture and Cooperation, Ministry of Agriculture, issued a Gazette notification amending certain provisions of the Plant Quarantine (Regulation of Import into India) Order, 2003, pertaining to treatment of wood packaging materials. The new Order exempts wood packing material appropriately treated and marked per ISPM-15 from the phytosanitary certificate requirement, and delays implementation of this clause until November 1, 2004.
- India, like some other emerging markets is , is not immune from corruption — nor, for that matter, from honest mistakes made as a sale winds its way through a complex system. Fortunately, in a majority of cases, a request for a bribe or some other form of favoritism will be abandoned if left unfulfilled. Local importers/buyers are familiar with local business practices, and can be of tremendous help in such situations. The exporter can also approach the local Canadian government offices for advice.

3.6.6 B.C. Market Opportunities and/or Initiatives for Further Growth

- Remarkably, due to the large population base and an expanding economy, some experts consider India a bigger consumer of wood in interior applications than even Japan.
- Parallels to another China market are real, but India's pace of growth for softwood exporters may be much slower in the short term based on trade results to date.
- A gradual decrease in the quality and availability of teak has opened the door to alternatives species including beech, birch, maple and hemlock.
- Imports of lumber and finished products are discouraged by high tariffs and this, plus the market preference for hardwoods (teak) will likely be the major deterrents to any short term growth for B.C. softwood commodity-type products in India.
- Opportunities to expand higher-valued and specialty softwood products in India are possible, but there has been only limited success so far by B.C. exporters.
- The recent closure of the Canada Wood office in India is a sign that market timing or a focus on more selected opportunities will be the likely reality for B.C. exporters in the short term.

The main sources of information used for the India market analysis include: Statistics Canada; WOOD Markets Monthly newsletter; USDA-FAS; and various industry newsletters (most information tends to be second and third hand sources). Specific FII market research reports include:

- India Exporters' Guide to India - BC Wood - 2004

3.7 Europe

3.7.1 B.C. & Canada Market Share

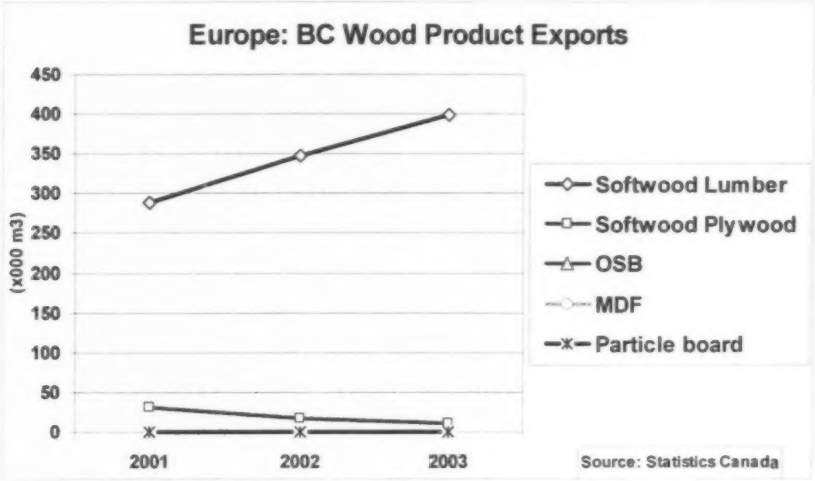
- The EU represents a huge consuming market, but most imports originate within neighboring European countries (offshore imports are becoming limited to specialty, niche or low cost products). The EU consumed almost 79 million m3 (33 billion bf – net) of softwood lumber in 2003 with a similar outlook for 2004. Of B.C.'s two major export products to Europe, its' exports of softwood lumber increased by 13% in 2003 and also increased in 2002 by 20%. Softwood plywood declined by almost 40% in 2003 for the second straight year with a similar trend occurring in 2004.

Summary of BC Exports by Major Market - 2003

Country:	EUROPE							
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other	Total
Total Consumption	(x000 m3)	78,601	2,542	2,619	5,764	28,737		118,263
Domestic Prod'n	(x000 m3)	77,167	1,485	1,993	8,712	31,092		120,449
Total Exports	(x000 m3)	33,941	1,377	1,168	6,153	10,235		52,874
Total Imports	(x000 m3)	35,374	2,434	1,795	3,205	7,879		50,688
Imports from Canada	(x000 m3)	439	11.1	0.0	0.6	0.0		450
Imports from BC	(x000 m3)	398	11.0	0.0	0.6	0.0		409
BC Import Market Share	(%)	1.1%	0.5%	0.0%	0.0%	0.0%		0.8%
BC Consumption Share	(%)	0.5%	0.4%	0.0%	0.0%	0.0%		0.3%
Imports from Canada	(Million $)	235	8.5	0.0	0.5	0.0	N/A	254
Imports from BC	(Million $)	235	5.3	0.0	0.5	0.0	10.4	251

*** Other - Limited to Doors, Windows, Moulding, Millwork, Hardwood Flooring & Furniture**
Source: Statistics Canada, COFI, WOOD Markets

- B.C. exports to Europe are summarized graphically below for the period 2001 to 2003.



3.7.2 Economic & Business Trends

- The overall economy in Europe was healthy in 2002 but weakened in 2003. Western Europe recorded a 1.3% GDP growth in 2002 and this slipped to 0.9% in 2003. Like many European nations in 2003, Germany was hit by the economic fallout of the global economic slump, the collapse of the stock market and the debilitating effect of terrorism on the confidence of consumers and investors. Germany has been underperforming for many years and its economy contracted in 2003 by 0.1% following nearly two years of stagnation. German GDP is forecast to improve mildly to 1.9% in 2004 while the rest of Europe will also have to deal with the implications of strengthening euro.
- **Euro Area:** GDP trends: 2002: +0.8%; 2003: +0.5%; 2004e: +1.8%; 2005f: +2.0%.
- **UK:** Economic growth was robust in the UK in 2004 as compared to the past year. In the second quarter of 2004, GDP was estimated to be 3.7% higher than a year earlier. This was the highest annual rate of increase in the UK for almost four years. UK interest rates have risen gradually over the past year to reach 4.75% by August 2004. Interest rates are expected to increase further by the end of the year, in response to signs of upward pressure on inflation. Manufacturing output was up by 1.6% in the second quarter, compared with the same quarter a year previously. Output in the construction sector increased by 9.1% in the year to the first quarter of 2004. This was the largest increase for 5 years. Housing completions in 2003 were at their highest for three years. The number of completions is expected to increase by around 9% in 2004. House prices have continued to increase rapidly, but recent survey evidence suggests that activity in the housing market is slowing.
- **Germany:** In 2003, the number of completed dwellings in Germany dropped to 268,000 units compared with 290,000 in the previous year (a drop of 7.6%). By way of contrast, the number of dwellings approved in the same period increased slightly from 274,000 to 297,000 (a rise of 8.4%). Private households have remained extremely hesitant when it comes to consumer spending. The causes are the difficulties on the jobs market, only moderate pay developments, and limitations on actual purchasing power brought about by an increase in the price of consumer goods (e.g. higher energy costs due to the strong increase of oil-prices; higher taxation on tobacco). With some 4.35 million unemployed, the situation on the jobs markets remains difficult (status: late August 2004). The unemployment rate lies at 10.5%. Numerous jobs have been lost in industry and construction, either as a result of downsizing or due to the recent stagnation phase.
- **Netherlands:** Dutch GDP growth averaged –0.9% in 2003. This was the first decline in GDP since 1982. In 2003, exports stagnated and domestic demand declined because of a significant drop in business investment growth for the third consecutive year and the largest drop in private consumption growth since 1981. Only government expenditure contributed positively to economic growth, but this contribution moderated as well. The year 2003 was overshadowed by an international economic recession. It was also a tough economic year for the Dutch forest industries sector. The consumption of sawn softwood declined in 2003 even further. The

consumption of hardwood showed a slight increase, while panel consumption was the same compared with 2002. An important reason was the decline in investments in buildings for the private sector. Private consumption was also stagnant. For the year 2004 Dutch GDP growth is expected to increase to 1.25% according to latest CPB forecasts. Exports will contribute more than 70% of GDP growth in 2004 with domestic demand still very weak. This pick-up in economic growth is lower than in earlier periods of recovery and is projected to lag behind overall GDP growth in the Euro area.

3.7.3 Domestic and Imported Wood Products Trends/Issues

- **UK:**
  - Demand from the UK construction sector for softwood sawn timber is good in 2004 and should continue in 2005 provided the housing market is not too depressed by the current increase in interest rates.
  - Garden furniture and timber decking have continued to benefit from the fashion for timber products led by lifestyle TV programs and magazines.
  - Despite product demand there have also been cost pressures in harvesting and production and as a result there has not been a significant price movement for growers.

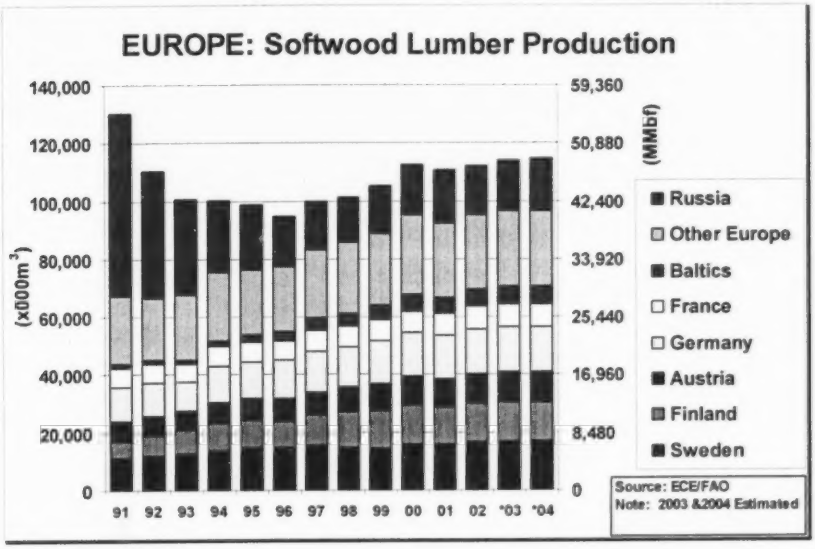
- **Germany:**
  - In 2003, a total of 51.2 million m3 of wood raw materials were used in Germany, representing a nearly 21% increase. Of these, 26.9 million m3 was in softwood, 3.7 million m3 in hard wood, and 20.6 million m3 in other types of wood. The dramatic increase was largely in soft roundwood (+28%), with over-exploitation of wood (damaged by insects and draught) occurring due to the extremely hot and dry summer.
  - Following the 2.2% reduction in total sales in the German wood and furniture industries in 2003 (wood down 2.6%; furniture down 2.1%), the figures for this year again give cause for careful optimism. In the first six months of 2004, sales in the wood based industry rose by 4% to EUR 18.4 billion (up 0.7 billion). The furniture industry, a key market segment within this sector, achieved annual sales of EUR 10.1 billion in the first six months of 2004, representing a 1.5% growth over the previous year. And with foreign orders expected to rise by 1.5% (furniture) and by 6% (other processing sectors) respectively, the outlook is optimistic for 2004 as a whole.
  - In contrast to the general trend in the German construction industry, the timber construction sector was largely successful in 2003. With growth at almost 10%, Germany's pre-fabricated homes industry clearly profited from the construction of single and two-family dwellings. Annual sales in pre-fabricated timber construction increased to EUR 1.46 billion in 2003 – a 6% rise over the previous year. Prices remained more or less stable. The export sector is seen as a future growth market. At 5.1%, export quotas are currently twice those for 2000. With

forecasts indicating significant growth for 2004 Germany's timber construction sector, compared with the construction industry in general, continues to boom.

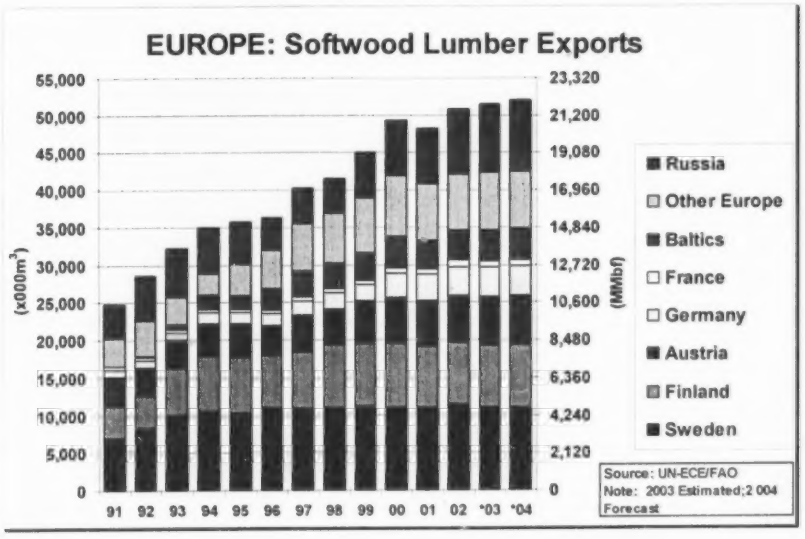
- In 2003, production of sawn softwood was around 16.7 million m3, some 2.5% down on the previous year. An increase of around 3% is expected for both the current and the following years. In terms of foreign trade, the industry association expects a 4% increase in imports and a significant rise in exports, as in the previous year.
- Production of sawn hardwood in 2003 was around 1.1 million m3 and matched the previous year. The industry association expects a slight increase in both the current and the following years. In terms of foreign trade, a slight drop in imports is expected for 2004 and 2005, with a marginal rise in exports.
- Compared with 2002, production of plywood in 2003 dropped further to 162,000 m3 (–42%). In this product area, foreign supplies play an increasingly greater role than domestic production. In foreign trade, a slight increase in imports but also a slight increase in exports is expected.
- Particleboard production rose by approx. 4.3% to 9.2 million m3 in 2003. A further slight increase is anticipated for the current year, followed by a slight drop in 2005. The foreign trade surplus could be consolidated.

- **Netherlands:**
  - The slowdown of the Dutch economy that became apparent in 2001 continued also in 2003. Special the decline in investments in buildings for the private sector and the stagnation in private consumption of wood products have resulted in a slight reduction in the consumption of sawn softwood. Compared with the minus 13 % in 2001 and 2002 one might say these are the first steps for recovery. Housing seemed to recover somewhat, but not enough to boost the use of softwood in this sector.
  - Sawn softwood production was 164,000 m3 in 2004 vs. 149,000 m3 in 2002;
  - Sawnwood softwood imports were 2.23 million m3 in both 2002 and 2003;

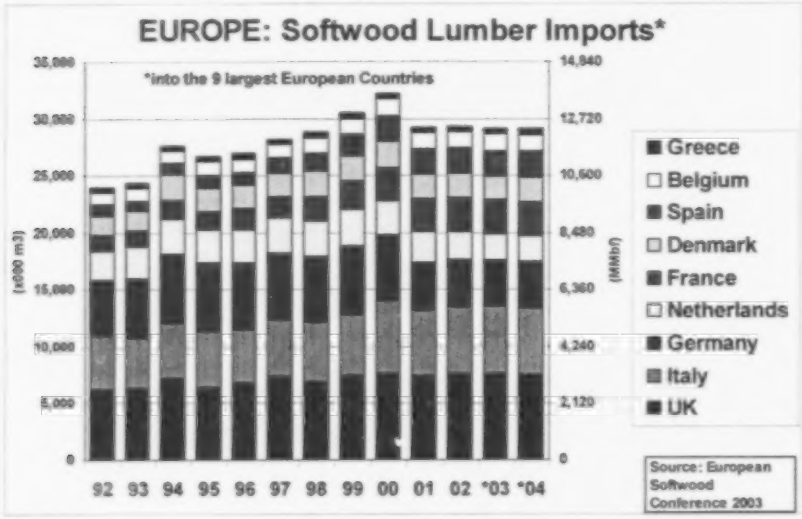
- The trends in European softwood indicate generally higher production levels despite flat consumption levels.



- European lumber exports continue to expand to core export markets in Japan, the U.S. and the Middle East/North Africa to permit higher production levels inside Europe.



- At the same time, intra-European and offshore imports have been flat since 2001.



3.7.4 Major Import Suppliers/Competitors to the Market

- Major Competitors to Canada by Major Product in 2003:
  - B.C. Softwood Lumber Exports – 91% are to five countries:
    - Italy 105,590 m3
    - Belgium 98,648 m3
    - United Kingdom 87,268 m3
    - Netherlands 39,658 m3
    - France 30,949 m3
  - Plywood/OSB: The U.K. imports the most softwood plywood (1.1 million m3 in 2003). Major offshore exporters of softwood plywood to Europe include Brazil and the U.S. Europe is self-sufficient and a net exporter of OSB with 2.4 million m3 of production. B.C. shipped just 11 million m3 of softwood plywood to Europe in 2003 – 9 million to the U.K. and virtually no OSB.
  - Particleboard/MDF: Europe is self-sufficient in non-structural panels and is a net exporter. The EU particleboard capacity was 32 million m3 in 2003 (31 million m3 in 2003) in 23 countries and other European regions added another 11 million m3. European MDF capacity was 12 million m3 in 2002 and 13 million m3 in 2003.
  - B.C.'s import market share is negligible - plywood registers a market share of less than 1%.

- The market share of B.C. and Canadian exports to Europe in construction/commodity lumber, plywood and OSB is declining due to lower cost European producers (Scandinavia as well as the Baltic States, Eastern Europe and Russia) as well as imports from other countries (softwood plywood from Brazil and South Korea). Some lower cost imported tropical hardwoods are displacing B.C.'s high grade appearance products in Europe.

3.7.5 Factors Impacting Import Growth for Wood Products

- After Japan, Europe (as a region) represents Canada's second largest offshore export market. Europe represents a major market for wood products as Europe has a strong wood culture. However, Europe has eroded to a much smaller market since the early 1990s to the point it represents just over 1% of B.C. wood products exports.
- Softwood lumber exports from B.C. have eroded from 1.3 billion bf in 1988 to just 122 million in 2001 (before increasing in 2002 and 2003. For the first 8 months of 2004, B.C. exports are off 4% from the same period in2004.
- Brazilian plywood has pushed both B.C. and the U.S. out of the European market. Canadian softwood plywood exports have declined from 340 million sf in 1995 to 12 million in 2003 and are a further 50% in the first 8 months of 2004.
- Timber frame housing construction is active in many countries although for imports, it is mainly limited to the U.K.
- The timber harvest and wood products production has expanded rapidly in Europe to the point that Europe has shifted from a net importer to a net exporter. This situation has limited the ability for North American exporters to access the European wood product markets. The rapid appreciation of the euro in 2003 and into 2004 has allowed for some increases in shipments to Europe from Canada, but not B.C.
- The EU has a high demand for certified wood products and environmentally-friendly products – something that B.C. is increasingly able to meet.

3.7.6 B.C. Market Opportunities and/or Initiatives for Further Growth

- B.C.'s long term position in Europe has been tentative for a number of years as lumber and plywood export volumes have plummeted to represent just 1% of B.C. exports. Softwood lumber has reversed this trend in the last few years and further growth is possible.
- Timber frame housing construction is active in many European countries - for imported softwood lumber and plywood, however, this has more recently been limited to the U.K. market
- The rapid appreciation of the euro in 2003 and 2004 has allowed for some increases in shipments to Europe from Canada but smaller volumes from B.C.
- Since the EU has a high demand for certified wood products and environmentally-friendly products, there is an opportunity for B.C. to take advantage of its certified

forests and wood products and sustainably managed forests and forest practices – something that B.C. is increasingly being able to provide.

- Existing timber frame building codes in the EU region could limit the use of imported Canadian structural lumber grades. Monitoring of the EU member countries' harmonization of building codes into a single system is required to ensure that Canadian products are not at disadvantaged or shut out.
- Further expansion of higher grade appearance coast whitewood lumber, western red cedar products, and in specialty products such as doors, windows, mouldings, millwork and flooring are potential fits with Europe. Promotion of B.C.'s sustainably managed forests and forest practices could also provide for improved opportunities against other exporters.

The main sources of information used for the Europe market analysis include: Statistics Canada; WOOD Markets Monthly newsletter; USDA-FAS; Timber Trades Journal, Holz Kurier, EUWID and various Association publications. Specific FII market research reports include:

- Europe Western Red Cedar Promotion in Europe - WRCEA / McRae - 2004 January
- UK/Ireland A Market Analysis Of Wood Products In the UK and Ireland - 2004

3.8 Australia/New Zealand

3.8.1 B.C. & Canada Market Share

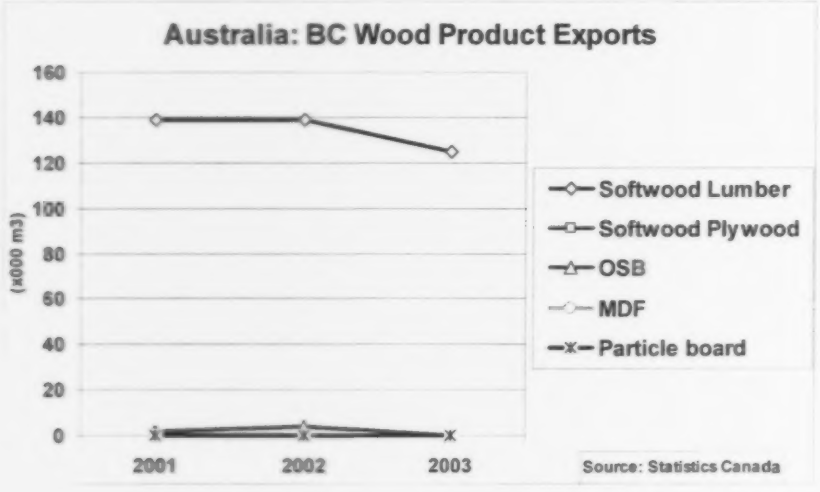
- Australia and New Zealand are small but highly niche markets for B.C. exporters with western red cedar and Douglas fir lumber representing the main volumes.
- B.C.'s lumber import market share in Australia was a respectable (but shrinking) 19% in 2003.

Summary of BC Exports by Major Market - 2003

Country:	AUSTRALIA							
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other	Total
Total Consumption	(x000 m3)	3,569	396	4.0	470	1,018		5,457
Domestic Prod'n	(x000 m3)	2,957	225	0.0	814	994		4,990
Total Exports	(x000 m3)	41	1.7	0.0	400	50		493
Total Imports	(x000 m3)	652	173	4	56	74		960
Imports from Canada	(x000 m3)	127	0.0	3.7	0.0	0.0		130
Imports from BC	(x000 m3)	125	0.0	0.2	0.0	0.0		125
BC Import Market Share	(%)	19%	0.0%	4.2%	0.0%	0.0%		13%
BC Consumption Share	(%)	3%	0.0%	4.2%	0.0%	0.0%		2.3%
Imports from Canada	(Million $)	69	0.0	1.1	0.0	0.0	N/A	71
Imports from BC	(Million $)	69	0.0	0.0	0.0	0.0	1.0	70

* Other - Limited to Doors, Windows, Moulding, Millwork, Hardwood Flooring & Furniture
Source: Statistics Canada, COFI, WOOD Markets

- B.C. exports to Australia are summarized graphically below for the period 2001 to 2003.



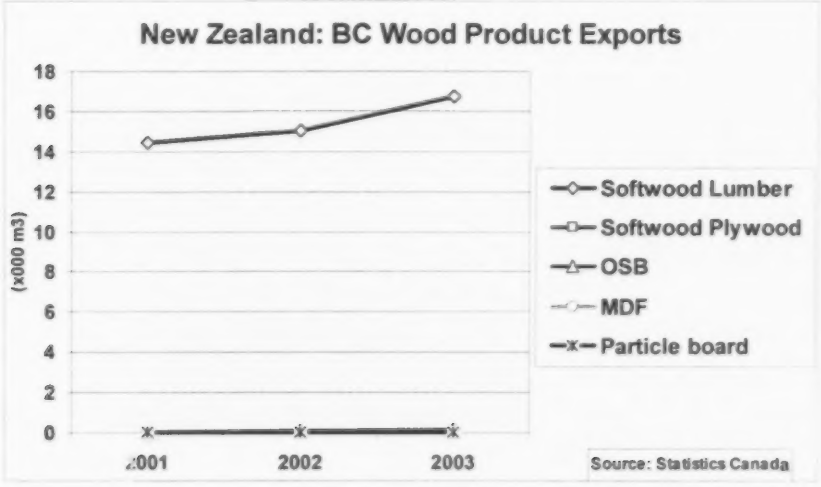
- New Zealand remains a very small market for B.C. with steady volumes of western red cedar lumber offering the only opportunity.

Summary of BC Exports by Major Market - 2002/03

Country:	NEW ZEALAND							
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other	Total
Total Consumption	(x000 m3)	2,678	256	0.4	212	90		3,236
Domestic Prod'n	(x000 m3)	4,291	344	0.0	871	198		5,704
Total Exports	(x000 m3)	1,632	101	0.0	668	111		2,512
Total Imports	(x000 m3)	19	13	0.4	8.9	2.2		44
Imports from Canada	(x000 m3)	17	0.0	0.1	0.0	0.0		17
Imports from BC	(x000 m3)	17	0.0	0.1	0.0	0.0		17
BC Import Market Share	(%)	88%	0.1%	30%	0.0%	0.0%		39%
BC Consumption Share	(%)	1%	0.0%	30%	0.0%	0.0%		1%
Imports from Canada	(Million $)	17	0.0	0.1	0.0	0.0	0.6	18
Imports from BC	(Million $)	17	0.0	0.1	0.0	0.0	0.6	18

* Other - Limited to Doors, Windows, Moulding,M illwork, Hardwood Flooring & Furniture
Source: Statistics Canada, COFI, WOOD Markets New Zealand Statistics Fiscal 2002/2003

- B.C. exports to New Zealand are summarized graphically below for the period 2001 to 2003.



3.8.2 Economic & Business Trends

- Both countries had strong economic performance in 2002 (3.6% for Australia and 4.4% for New Zealand). However in 2003, their economies slowed markedly: to 2.5% in the case of Australia and 2.6% for New Zealand. Strong wooden housing starts in 2002 carried over into 2003 and 2004 in part due to low interest rates and strong employment results. While exchange rates with the US were stable in 2002, Australia and New Zealand have had to adjust to their respective currencies appreciating 20% and 25% in 2003 and further in 2004. This has increased their import purchasing power but has decreased global competitiveness with other exporting countries.
- Australian housing starts have been strong since 2000 and it expected that its four-year run will ease lower in 2005 as a slow down looms.
- Australian structural lumber prices have been the highest in the world since 2000 but B.C. has not seen any growth while other competitors (especially Europe) have increased their import market share substantially.

3.8.3 Domestic and Imported Wood Products Trends/Issues

- Australian softwood lumber and MDF continued to increase their shares in the domestic market. Australian MDF exports also increased their international market share substantially. The quantity of Australian softwood lumber exports remains insignificant.
- Led by B.C., Canadian Douglas Fir shipments rose 23% in 2003 compared to 2002, reaching 33,000 m3 (14 million bf). Volumes through the first three quarters of 2004 from Canada are off only 1% compared to the first nine months of 2003. While Canada remains Australia's largest Douglas Fir supplier, some exporters say future prospects in that market are shaky.
- Douglas Fir is, however, being threatened by an increasing use of engineered trusses, laminated wood products, and domestic radiata and hoop pine. Many longtime carpenters in Australia who traditionally use Douglas Fir appear to be giving way to builders who prefer engineered products.
- Other exporting nations have challenged for market share in softwood lumber (including Stora Enso's Czech Republic spruce and pine mills) as a brisk housing market for most of the year has fueled strong overall demand.
- Specific to New Zealand, the residential building code now requires that all timber framing be pressure treated – this is a problem for Douglas-fir as it is a difficult specie to pressure treat.

3.8.4 Major Import Suppliers/Competitors to the Market

- Major Competitors by Major Product in 2003:
  - Softwood Lumber: Both countries have large domestic industries and New Zealand dominates Australian imports. European exporters of spruce have been able to ship increasing volumes of 2x4 studs into Australia while B.C. SPF almost remains shut out of this market (green/KD Douglas fir represents most of B.C.'s lumber exports).
  - Plywood/OSB: Both countries have large domestic industries and New Zealand dominates Australian plywood imports. OSB is a niche product so far.
  - Particleboard/MDF: Both countries have large domestic industries and Australia and New Zealand are major exporters of MDF.
  - Specialty/Value-Added: Both countries have moderate sized industries.

3.8.5 Factors Impacting Import Growth for Wood Products

- Significant increases in the supply of Australia's wood resources have occurred over the past decade. Log production in 2001-02 was 46 per cent above production in 1991-92, with softwood logs contributing much of the increase. An expanding log supply provides opportunities for downstream industries to lower their costs of production through increasing economies of scale. In turn, this is likely to improve the competitiveness of the industry in domestic and international markets, possibly leading to increasing market shares.
- Australia is a modest sized market with increasing volumes of plantation timber and engineered wood products that have been steadily displacing B.C.'s Douglas fir. New Zealand is an even smaller market but is a larger exporter since it exports about two-thirds of its total production. Both countries have had a long history in the use of high grade western red cedar lumber for producing exterior doors and millwork products. B.C. has a high image for quality in both structural and western red cedar lumber.
- Since May 2003, the Australian Quarantine and Inspection Service imposed a new policy requiring all Douglas Fir timber imports be kiln dried to prevent the spread of Pine Pitch Canker. Consequently, phytosanitary issues have become a key non-tariff barrier and the market is also purchasing wood that is pasteurized or heat treated. For heat-treating, the core of the lumber must reach a temperature of 56 degrees Celsius for 30 minutes. Lengthy shipping times and rising freight rates have hampered sales further for both B.C. and U.S. exporters.

3.8.6 B.C. Market Opportunities and/or Initiatives for Further Growth

- Douglas fir lumber remains a niche species for the Australian market despite increasing competition from other species and engineered wood.
- Western red cedar is facing pressure from competitively priced durable tropical hardwoods but also remains as a niche species in both Australia and New Zealand.
- In the short term likely, any opportunities for B.C. exporters will likely be limited to existing Douglas fir and western red cedar lumber sales.
- Opportunities for finished products may be impacted by New Zealand and Australia's increasing self-sufficiency of production as well as competitive pressure from substitutes.

3.9 Canada

- For perspective, the relative size of the Canadian market and B.C.'s volume of shipments into Canada is profiled below.
- Canada is the major destination for B.C. softwood plywood with a 69% share of Canada consumption.
- OSB shipments in Canada may be over-stated due to some identified errors by Statistics Canada.

Summary of BC Exports by Major Market - 2003

Country:	CANADA							
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other*	Total
Total Consumption	(x000 m3)	27,468	1,748	2,388	674	2,145		34,423
Domestic Prod'n	(x000 m3)	77,699	2,183	10,201	1,232	2,991		94,306
Total Exports	(x000 m3)	50,897	542	7,926	599	1,113		61,078
Total Imports	(x000 m3)	666	107	114	41	267		1,195
BC Shipments to Canada	(x000 m3)	6,886	1,206	602	40	73		8,808
BC Consumption Share	(%)	25%	69%	25%	6%	3%		26%
Total BC Production	(x000 m3)	36,086	1,721	1,795	199	264	0	40,064
Total BC Exports	(x000 m3)	29,199	514	1,193	159	190	0	31,256

* Other - Limited to Doors, Windows,M oulding, Millwork,Hard wood Flooring & Furniture
Source: Statistics Canada, COFI, WOOD Markets

Summary of BC Exports by Major Market - 2002

Country:	Canada						
	Units	Softwood Lumber	Softwood Plywood	OSB	MDF	Particle-board	Other*
Total Consumption	(x000 m3)	28,825	1,706	2,270	104	2,062	
Domestic Prod'n	(x000 m3)	78,281	2,159	9,601	902	2,818	
Total Exports	(x000 m3)	49,988	556	7,467	847	1,273	
Total Imports	(x000 m3)	533	104	136	50	516	
BC Shipments to Canada	(x000 m3)	5,256	1,018	161	93	80	
BC Consumption Share	(%)	18%	60%	7.1%	89%	3.9%	
Total BC Production	(x000 m3)	33,563	1,550	1,309	157	260	
Total BC Exports	(x000 m3)	28,307	533	1,149	64	180	

* Value-Added - Limited to Doors, Windows, Moulding, Millwork, Hardwood Flooring & Furniture

Sources:

A number of sources in this report have been liberally used to summarize trends in key markets. This includes a number of reports funded (in part or in whole) by FII as well as various B.C. Association reports, USDA-FAS, country and association reports, trade magazines and others.